# The Economy in the Third Year of War

#### A Review of 1944

THE YEAR 1944 saw the culmination of the Nation's war production drive, with the resources mobilized to provide an adequate flow of materiel to the fighting fronts and at the same time to sustain a volume of consumption by the civilian economy not excelled in any pre-

vious year.

Almost every phase of economic activity recorded substantial achievements, as witnessed by such general indicators of economic conditions as the gross national product, manufacturers' shipments, and transportation volume. Of course, the requirements of an economy geared to offensive warfare did not spread their impact evenly. In fact, the changing character of production requirements even necessitated contraction of certain fields, such as construction. Such contraction, however, was offset by the increased output in other sectors of economic activity.

Total 1944 production, or the gross national product, exceeded the output of the previous year by 6 percent in dollar terms, and by about half that relative amount in quantity terms. This further increase reflects the rise in munitions output.

#### Shifting Character.

The economic character of 1944 differed from that of the first two war years in two important respects. In the first place, it was a year in which major economic decisions were carried out rather than made. The entire framework of our economic mobilization for war, both with regard to machinery and policies had not only been determined but was actually functioning by the end of 1943.

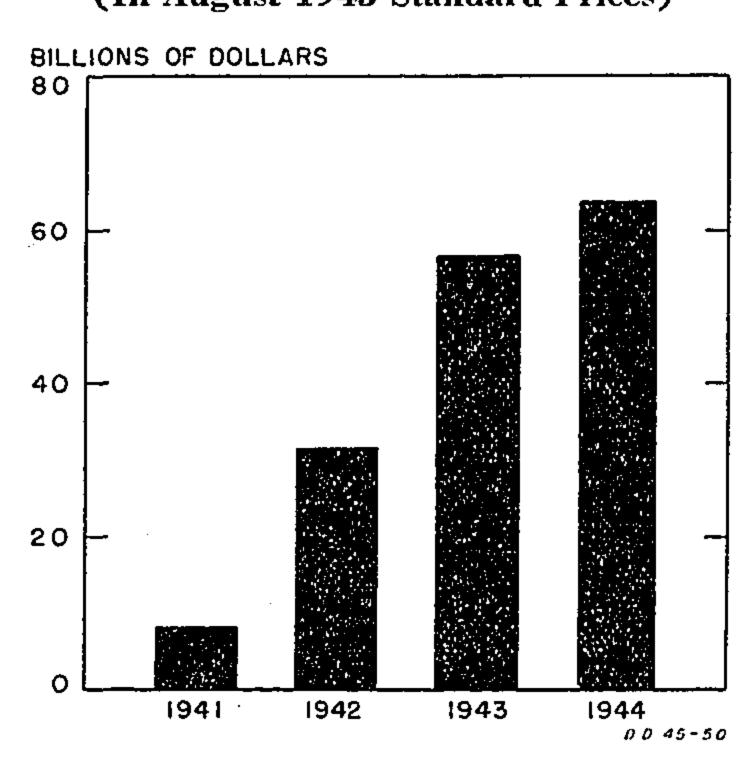
During the previous years of war, steps had been taken to assure the proper allocation of materials, to mobilize the Nation's manpower, to build and set in operation the new industrial facilities required for wartime needs, and to adjust the entire structure of production to wartime requirements. Even the fiscal and administrative program for coping with inflationary pressures had been completed.

In 1944, by contrast, the only problems on the economic front were those of adjusting minor difficulties involved in maintaining operations of the productive machine. There were, of course, continuous problems in connection with specific items in the munitions program due to changing war requirements or bottleneck conditions, but meeting these did not require major decisions of policy or major changes in the administrative or productive machinery.

The high degree of economic stability is a second feature distinguishing 1944 from the first two years after Pearl Harbor. In contrast to the sharp upward movement in productive activity which occurred in the two earlier years, there was very little change in the basic economic indicators from January to December of 1944. In all essential areas peak rates of production had been achieved by the beginning of the year so that 1944 as a whole represented a reaping of the benefits of the economic mobilization already established.

From the standpoint of future policy, with respect to both the war and peacetime economic potentials, two aspects of the high utilization of resources of 1944 should be emphasized. The one is that although production during the year was the largest ever achieved, it did not represent the maximum possible had the military situation required substantially larger output.

## Chart 1.—Munitions Production (In August 1943 Standard Prices)



Source: Facts for Industry, War Production Board.

In essence, the pressure for total production was determined by the munitions requirements of military agencies. In the main these demands were met without utilizing economic capacity to the utmost. While resources were being used considerably in excess of peacetime rates even under prosperous conditions, nonetheless even higher output was possible had the decisions been made earlier to this end. This is made clear by a contrast of the degree of manpower mobilization in this country with that of other major belligerents.

#### Industrial Efficiency.

The year's record is one of high testimony to the industrial efficiency of the country which, once it was organized to mass produce war goods, turned them out at a rate that permitted maximum

concentration upon the use of our military power in bringing our enemies to the point of surrender. With the tremendous aid of the allied powers, whose strength was augmented by the flow of Lend-Lease supplies from this country, the year witnessed great progress toward the final destruction of the armed forces of our enemies, of which Germany and Japan stand alone at the beginning of 1945.

This production record was achieved with comparatively minor disturbance to the civilian economy, and with far less than complete control over business and individuals.

The impact on the civilian economy was confined primarily to the elimination, or reduction, of output of metal goods and certain commodities dependent upon imported raw materials. Beyond that, the entire wartime structure of controls in the civilian sphere was designed to prevent a further expansion of output for civilian use, and a further increase in prices, in response to rising purchasing power.

The American economy in 1944 was as little regimented as can readily be imagined under conditions of modern warfare.

The production volume of 1944, in the face of the limited controls imposed testifies to the amazing economic potential of the Nation. It offers a striking contrast to economic conditions in the years immediately preceding the war. at which time the economy regained the production levels of the previous decade but did not utilize the enlarged working population or capitalize fully on the increased efficiency of the following ten years.

It is abundantly clear that in facing the economic problems of the future, plans will have to be made and goals set on the basis of the demonstrated capacity of our resources. These goals, in terms of goods and services which can be made available for increasing the well-being of the population can, and must be, far ahead of the pre-war volume.

#### Economic Prospects for 1945.

At the end of 1944 it was apparent that the economic situation in the coming year would depend primarily upon the duration of the war in Europe. Although the duration of that struggle could not be known, the main lines of economic development either in the event that the war ended early in the year or continued throughout the year were clear.

If the war should end fairly early in the year it is evident that a great deal of the tension under which the economy was operating would be released. The fundamental factor would be a substantial curtailment of munitions production with the possibility of some reduction in the size of the armed forces and of the military drain on civilian-type goods. All in all this would mean a substantial freeing of economic resources which would open the way to partial reconversion on a sizable scale.

Under these conditions a decline in production volumes is a virtual certainty. This would be the case not only in the interval of the shift from war to civilian production but also after that shift was accomplished for the reason that the release of the tension on the economy would result in some contraction of the labor force.

With job opportunities not so far in excess of persons seeking work, it is to be expected that the volume of frictional unemployment would increase, while the number of persons seeking work would tend to decrease. But, perhaps more important in the initial period there would be some reduction in the average length of the work-week through the elimination of overtime.

Furthermore, just as there has been some deterioration on the quality of service during the past three years because of the manpower shortage in many lines of business, so in the reconversion there will be absorption of manpower in these trades to improve the quality of such services.

All these factors will necessarily mean a smaller volume of output as it is usually conceived or measured.

It must be emphasized that business conditions in this period will be exceptionally good—even though there will be some contraction in the volume of output. So long as the war in the Far East continues, the volume of Government expenditures will remain high and, in conjunction with the deferred demand for both consumption and capital goods of various types, will assure favorable business volume.

While employment may be expected to be reasonably good during this period, nevertheless there will be an increase in the number of unemployed and there should be no difficulty in keeping the required forces on the job to meet the reduced munitions programs. It should be borne in mind that a very large part of the munitions is turned out by companies to which a high proportion of individuals must look for employment after the war.

The probable economic situation in 1945, if the war in Europe should continue, likewise seems clear. By the end of 1944 many more recurring tasks in the economic mobilization for war had been completed.

The military forces up to their planned size had been equipped; the wartime merchant fleet had been largely built; supply pipelines from the production centers to the battle fronts had been filled; reserve supplies of war materials had been built up; and the flow of Lend-Lease war supplies of our Allies had passed its peak. Consequently, the military requirements of the coming months would be largely conditioned by attrition on the battlefields, by changes in needs brought to light through battle experi-

ence and by improvements in the design of combat weapons.

While these factors were certain to cause upward revision of some individual schedules in the munitions program, they could not be expected to hold total output to the level established earlier during the mobilization period when the provision of initial equipment was such an important factor.

Total production will not be maintained with any substantial reduction in munitions output, unless measures are taken beforehand to shift the released resources to other uses. In the absence of the planning of these shifts, there will be a tendency for workers to drift from the labor market and for total activity to contract. Any such contraction, however, is not likely to be of significant proportions so long as large-scale military operations continue in both Europe and the Far East.

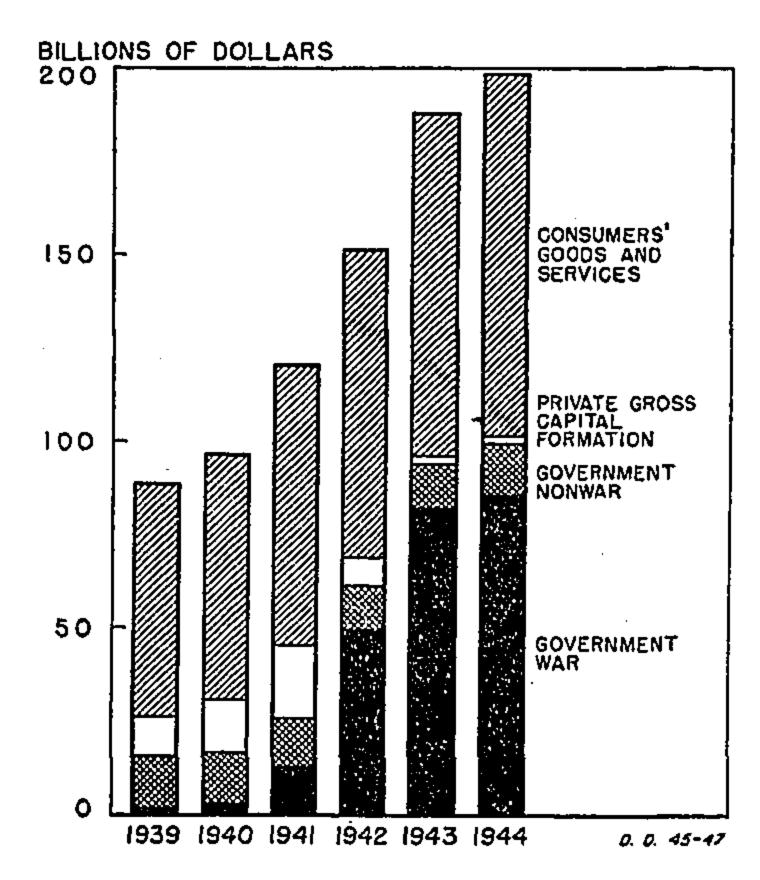
## National Income and Product

The main features of economic activity in 1944 and their relation to developments since the outbreak of the war are best shown by the statistics of national income and gross national product. These clearly support the generalization previously made—that 1944 was a year of record production volume but one in which the upward trend in activity of the earlier war years yielded to a stable pattern.

#### **Gross National Product.**

In 1944, the gross national product—the total value of currently produced goods and services flowing to Government, to consumers, and for purposes of gross capital formation to business—amounted to almost 200 billion dollars. In current dollars this was more than twice the total production of 1939, the last full year uninfluenced by rearmament and war (chart 2). War purchases absorbed the largest part of the increase. Total consumer expenditures—though not all components—were also substan-

## Chart 2.—Gross National Product



Source: U. S. Department of Commerce.

tially higher. The current dollar data showed reductions only in private gross capital formation and in Government nonwar purchases.

#### Change in Real Value.

It is well known, of course, that the rise in prices has accounted for a substantial part of the increase in total gross national product and its components since 1939. Although it is not feasible to correct for the inflationary factor in an exact manner, the available price data and the conventional methods of adjusting for price changes show that the gross national product in constant dollars rose more than three quarters from 1939 to 1944. The implicit price rise for output as a whole over this period is calculated at about one-fourth, with the price rise in the consumers' expenditure component calculated at one-third.

In evaluating this increase in gross national product after price adjustment in relation to either the pre-war or possible post-war production totals, it is necessary to recognize certain aspects of the wartime production measurement. Of considerable quantitative importance is the fact that the value placed upon the services of the armed forces is measured by the pre-war rates of pay of military personnel. This means that the contribution of the armed forces to the deflated gross national product is considerably less than the value of output that a similar quantity of manpower would contribute in nonmilitary pursuits.

On the other hand, there is the possibility that the value of munitions output, prices of which are assumed to have been constant in the price deflation of the gross product, tends to overstate the increase in total production during the past four years. This possibility does not rest upon the assumption of constant munitions prices, since the increase in munitions output determined from production records provides verification of the assumed price trend. However, the increase in total production would be overstated if the rates of compensation of the labor, capital, and enterprise in munitions production before the war had been higher than the rates prevailing in comparable types of production activity apart from munitions.

The fact that munitions prices at the initiation of the rearmament program and subsequently have not been determined by the usual play of market forces lends weight to this possibility. While some analysts are concerned that this was the case, the available evidence does not lead one to attach large quantitative importance to this factor. The high rates of compensation in munitions production would seem, rather, to be dependent upon the economies of larger scale production which have occurred in civilian types of production as well as in munitions output.

So far as the consumer goods and services component of the gross product is concerned, it is widely recognized that the existing price data do not fully reflect the poorer quality of goods and services, the absence of lower priced lines, and the more limited choice of goods available. This does not mean that

the measures of real consumption give a seriously misleading impression of the impact of the war upon consumers. It does not mean either that under peacetime conditions it is to be expected that the present value of consumers' goods output at existing prices could be produced with the economic resources now devoted to their production. Without the stresses and shortages of war, the consumer could demand and could obtain better quality and more services for the price he is now paying.

Notwithstanding the foregoing, the very large increase in production during the war is confirmed by everyday observation, and by the quantity measures that are available for particular products.

It is a fact that a huge war program—the efficacy of which is now being proved on the battlegrounds—was attained largely by increasing total production. It was superimposed upon the aggregate flow of goods and services to civilians rather than displacing the latter. It disturbed and distorted that flow, no doubt, by forcing sharp reductions in some sectors, but at the same time it stimulated further expansion in others.

From 1943 to 1944 gross national product increased 11 billion dollars, as against an increase of more than 30 billions in each of the two preceding years. How aggregate production leveled off is shown, however, only by its movement during 1944. Gains over 1943 were made largely in the first half of the year and the levels reached were not significantly exceeded thereafter.

#### War Expenditures.

The key to the stabilization of the economic scene is, of course, to be found in the leveling off of war expenditures, whose spectacular increase in recent years was responsible for lifting production and incomes to their present record heights. These expenditures amounted to 86 billion dollars in 1944, as compared with 82 billions in 1943—an increase of only 4 billions, as against one of 33 billions from 1942 to 1943, and of 36 billions from 1941 to 1942.

During the year 1944 war expenditures did not advance further. Preliminary figures even indicate some decline from the peak reached in the first half of the year. The recent stability is also reflected in table 1 which gives the proportion of total output that was absorbed by war expenditures.

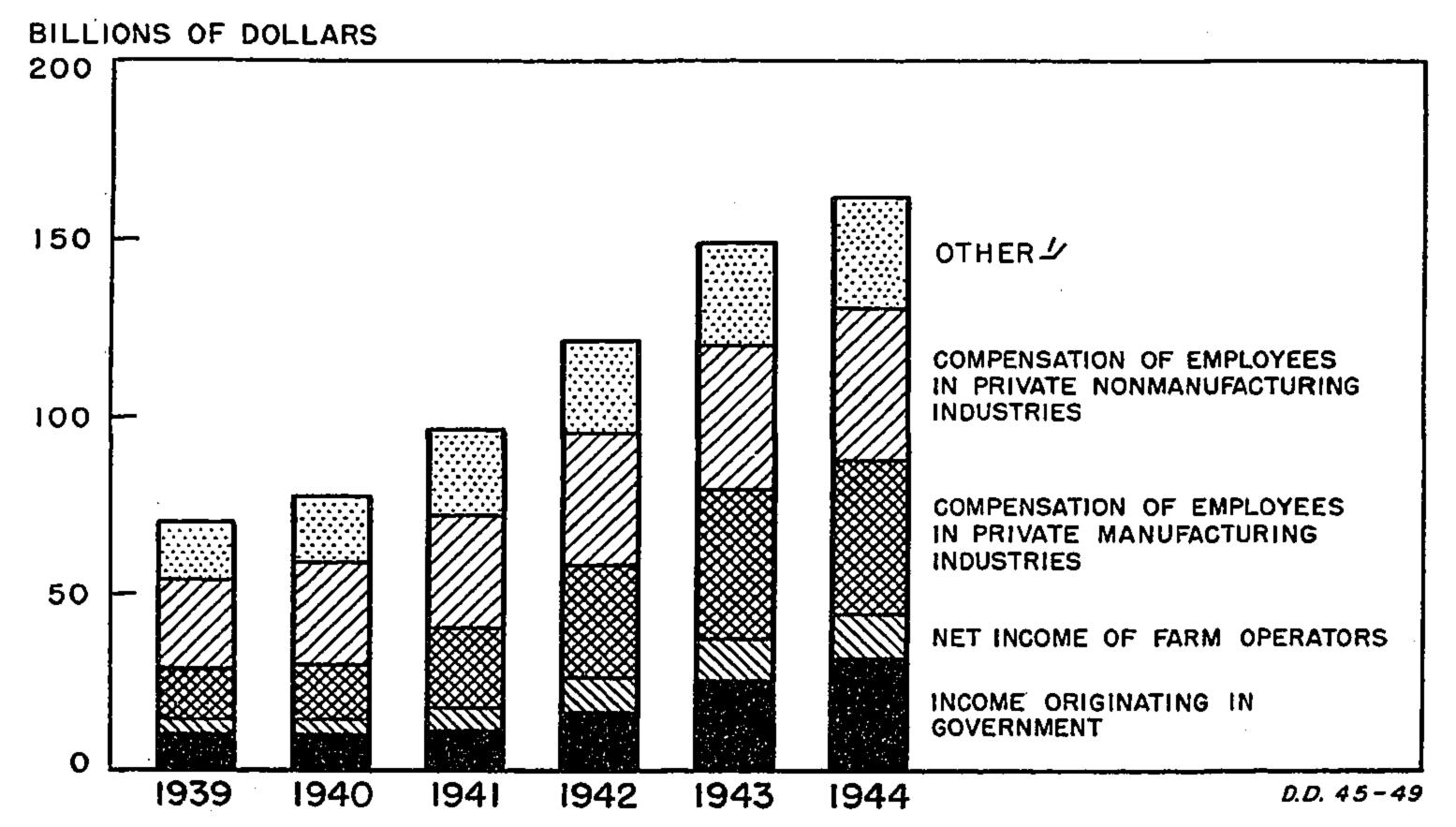
Table 1.—Gross National Product and War Expenditures

[Billions	of	dollars]
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Year	Gross national product	War expend- itures	War ex- penditures as percent of gross national product
1939	88.6 97.1 120.5 151.5 187.8 198.7	1. 4 2. 8 13. 3 49. 5 82. 5 86. 3	2 3 11 32 44 43

Source: U.S. Department of Commerce.

## Chart 3.—Components of the National Income



<sup>1</sup> Includes corporate profits, net income of nonfarm proprietors, and private interest and net rents. Source: U. S. Department of Commerce.

Additional light is thrown on the economic situation by a separate examination of outlays for munitions, construction, and nonmunitions, the major components of the war program. Nonmunitions include a miscellany of items. Their movement, however, has closely reflected the pay, travel, and subsistence of the armed forces, transportation and other contractual services, all of which are related either to size or scale of operations of the military establishment.

In the early phase of economic mobilization, munitions, construction, and nonmunitions each contributed to the increase in total war expenditures. Subsequent shifts have mirrored the gradual transition from the mobilization phase to the actual conduct of military operations.

From 1942 to 1943 construction fell off sharply, but munitions and nonmunitions registered further substantial advances with nonmunitions slowly gaining in relative importance. The direction of the movement was similar between 1943 and 1944, but the advance in munitions was only a small fraction of earlier gains, and as a consequence nonmunitions accounted for a significantly larger proportion of the total in spite of the fact that they, too, leveled off.

#### Government Nonwar Expenditures.

Government nonwar expenditures for goods and services in 1944 increased somewhat from the lows to which they had fallen in 1942 and 1943. The increase was due mainly to larger interest payments on the Federal debt, which are included in this classification even though their recent growth reflects the cost of financing the war. The sum of the remaining items showed little change.

This stability is explained by an examination of the components. The bulk of the sharp cut in government nonwar outlays on goods and services during the war years was in Federal public works and work relief expenditures as well as

in state and local construction. These reductions had been made by 1943, and outlays continued even thereafter, further small economies in certain sectors being about offset by expansion in others.

#### Private Gross Capital Formation.

Private gross capital formation continued comparatively low—approximately two billion dollars. As in 1943 a small volume of private construction and machinery and equipment purchases was accompanied by reductions in inventories and in the foreign balance.

For several reasons the war had a particularly sharp impact on private capital formation. The war effort required a large volume of construction and of machinery and equipment which resulted in a record volume of total capital formation during the mobilization phase of the war program. The fact that the bulk of this capital formation was publicly financed was reflected in a sharp cut in the privately financed portion. In view of the durability of existing equipment, new purchases could be foregone by private industry, resulting in no immediate sacrifice to civilians.

The using up of business inventories permitted consumer and government expenditures to proceed at levels in excess of current production, and the draft on the foreign balance had a similar function. The cut of private gross capital formation thus provided not only a technically efficient method of obtaining war output but also the one that was felt least burdensome to civilians.

Sharply reduced Government outlays on war construction did not lead to any significant resumption of private construction activity in 1944. Manpower and other resources no longer required for Government projects were shifted to uses that were deemed more essential. Private construction amounted to only 1.6 billion dollars, a figure not much in excess of the low of 1.5 billion dollars to which it had fallen in 1943.

With respect to producer's durable goods the situation was somewhat different. These have a shorter life than construction and accordingly civilian replacement needs were more urgent. Hence reduced requirements of the war program in 1944 were accompanied by a sharp increase in allocations to civilian users.

Thus, for instance, trucks bought by private businesses about doubled between 1943 and 1944. Purchases of farm machinery were three-fourths more, and exceeded the previous highs of 1937 and 1941. Preliminary data also indicate some increase in manufacturing machinery and equipment. In spite of these gains, however, this segment of private capital formation continued sharply restricted also.

Reduction of business inventories amounted to 1.7 billion dollars in 1944. This was considerably in excess of the rate at which liquidation had proceeded in the two preceding years. The major declines were in manufacturing and farm inventories.

In contrast to this, trade inventories in 1942 and 1943 accounted for the net reduction more than offsetting an accumulation of manufacturing and farm stocks. The draft on the foreign balance also continued. As in the preceding year, merchandise and Government transactions contributed in approximately the same proportions to a deficit of about 2 billions.

#### Consumer Expenditures.

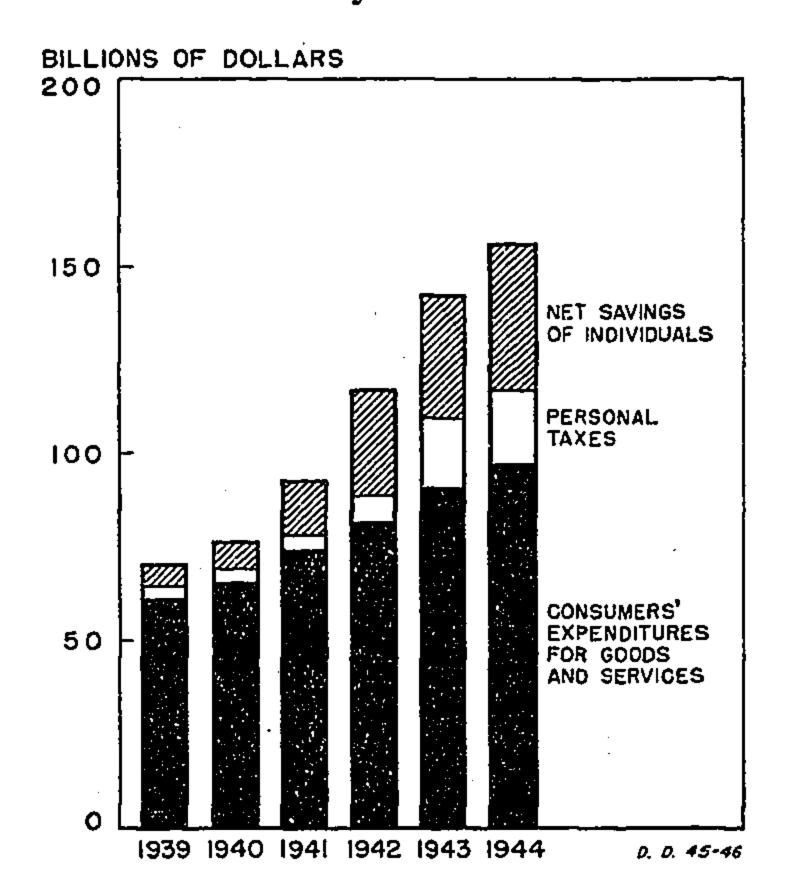
Consumers spent almost 98 billion dollars for goods and services in 1944, 7 billion more than in the previous year. The most important gains were registered in the food group, which also includes beverages and eating and drinking places, in clothing, and in consumer services. But all other major categories of expenditures also increased.

It is well known that the higher dollar total of consumer expenditures is due to a large extent to a rise in prices rather than to an increase in volume. If the current dollar figures for 1944 are corrected for the price rise which can be statistically measured, all categories of expenditures with the exception of food appear to be virtually unchanged from their 1943 level. In the food group alone an expansion beyond price rise is indicated. Such expansion reflects in part a genuine increase in volume. On the other hand, it reflects the fact that present statistical techniques of deflation are deficient, because price quotations representative of the true quantity change are not available for many important components of expenditures.

Because of the difficulties of correcting for the inflationary factor, it is not possible to evaluate precisely the current position of civilian consumers. But the statistics confirm what common observation suggests—that in overall terms 1944 was a year of continued high consumption, far above the pre-war year 1939.

The cuts that were made as early as in 1942 were confined to a small number of items. On these the impact of the war was sharp. In 1944 combined expendi-

## Chart 4.—Disposition of Income Payments



Source: U. S. Department of Commerce.

tures for automobiles, gasoline and oil, and for furniture, furnishings, and household equipment, which bore the brunt of the reduction, amounted to less than one half of the 1941 figure in real terms. But the sum of these commodities does not bulk large in consumer budgets. Even in 1941 they accounted for only 13 percent of total expenditures. Their sharp reduction was compensated by further expansion in other items that were not restricted by the immediate requirements of the war.

It is sometimes assumed that the increase in Federal excise tax rates accounts for a significant proportion of the total rise in the price of consumers' goods and services which has occurred during the war.

The total increase of about 3 billion dollars in the yield of Federal excise taxes between 1939 and 1943 accounts for only about 12 percent of the gap between 1944 consumer expenditures expressed in current and in 1939 prices. This figure, moreover, is an upper limit of the influence of Federal excise taxes, because not all their increase should be allocated to items bought by consumers. Nor can it be assumed that the full amount of the tax is always passed on to the consumer in the form of higher prices.

#### National Income.

Changes in the national income (the sum of earnings accruing to individuals for the participation of their labor and capital in production) were shaped by the same forces which controlled the gross national product. The national income total of 161 billion dollars represented a gain of 11 billion over 1943, compared with an average increase of 26 billions in the two preceding years (chart 3).

Government pay rolls, which include the pay of the armed forces, accounted for more than 5 billions of the 11 billion increase in national income. Manufacturing wages and salaries rose nearly 2 billions, and other private nonmanufacturing pay rolls about 3 billions. Transportation, trade, and services were responsible for most of this 3 billion rise, in addition to offsetting a continued decline in construction.

Federal interest and net income of nonfarm proprietors accounted for the bulk of the 1.6 billion dollar increase in income shares other than wages and salaries.

None of the three income items which have been chief contributors to the sharp rise in national income over the war period increased as much from 1943 to 1944 as in the preceding year. In combination, these components—manufacturing, Government pay rolls, and net income of farm proprietors—rose 18 billions in 1942, 22 billions in 1943, and only 7 billions in 1944. Tapering in the rate of gain for these three dynamic components was responsible for the reduced expansion of national income.

The pattern as well as the magnitude of the 1944 growth in national income differed sharply from that of the preceding years. Of the total increase in national income from 1941 to 1943, 47 percent was concentrated in manufacturing pay rolls, and net income of farm proprietors. Government pay contributed 28 percent. In contrast, the first two components accounted for only 14 percent of the 1943–4 expansion, while Government pay was responsible for 45 percent of the increase.

These changes were further accentuated during the second half of 1944, when manufacturing wages began to decline in absolute terms. Government pay rolls continued to advance. But as the military establishment approached its full strength, it was apparent that the main period of expansion of this component also had passed, and that its further growth would be largely confined to the effects of such secondary factors as premium pay for overseas service and military promotions.

Thus, by the end of 1944 the main forces behind the increase of wages and salaries were spent, though further small increases in the totals were not precluded.

Net income of farm proprietors, the remaining branch of the income stream whose rapid growth had characterized wartime expansion, remained at about the 12 billions reached in 1943. A small increase in gross income, induced mainly by a slight advance in farmers' selling prices, was approximately offset by the continuing rise of farm production costs. In contrast, from 1940 to 1943 rapidly mounting farm prices outstripped the advance in production expenses. In conjunction with a substantial increase in the physical volume of production, this increasingly favorable cost-price relationship resulted in a near tripling of farmers' net incomes over this 3-year span.

#### Corporate Profits.

Preliminary data indicate that business had another profitable year. Corporate profits after taxes were about the same in both 1943 and 1944—almost 10 billion dollars. This is more than twice

the profits of 1939, the last full year uninfluenced by rearmament and war, and three billions higher than profits in the prosperous year 1929. It will be noted, however, that these profit estimates are significantly higher than those published previously before the availability of the latest corporate income tax data.

In interpreting these figures it should be kept in mind that for the last two years the estimates are based primarily upon data for large corporations. There are indications that in this period the earnings of smaller corporations have increased more rapidly than those of large ones, and although some allowance has been made for this factor, it is pos-

sible that the estimates, especially for 1944, are still too low. Unincorporated business has likewise experienced profitable business during the war though many proprietors were induced to go into war industries because of better opportunities for income, or for a variety of other reasons.

Over-all stability of corporate profits was the result of divergent component movements. As is well known, the profits of some companies have recently declined. These are generally corporations which converted to the war and attained full war production early, or whose output is related to segments of the war program with peaks past. Their experi-

ence is mirrored, for instance, in the profits of the construction and machinery groups.

On the other hand, corporations whose full participation in war production was delayed for technical reasons, or whose production has continued to grow because of increasing military requirements, have further improved their profit position in the past year. Their experience is reflected, for example, in the profit record of the transportation equipment, oil refining, and rubber industries.

One further generalization is warranted. It is apparent from the data that the rise in profits during the war

Table 2.—National Income and National Product, 1941-44 <sup>1</sup>

[Billions of dollars]

						<u> </u>	Unad	justed			<u> </u>			}	Seaso	onally .	Adjust	ed Anı	nual R	ates	
Line	Item		1941			1942			1943			1944		19	41	19	942	19	43	19	44
	<u> </u>	First half	Sec- ond half	Total	First half	Sec- ond half	Total	First half	Sec- ond half	Total	First half	Sec- ond half	Total	First half	Sec- ond half	First half	Sec- ond half	First half	Sec- ond half	First half	Sec- ond half
	GROSS NATIONAL PRODUCT OR EXPENDITURE						:														
1	Total.	55. 7	64.7	120. 5	68.8	82.7	151. 5	90. 5.	97.3	187.8	97.8	100.9	198. 7	113.1	127. 9	139. 1	163.9	183. 2	192.3	197. 4	200. 1
2 3 4 5 6 7 8 9 10	Government expenditures for goods and services Federal Government War Nonwar State and local government Output available for private use Private gross capital formation Construction Residential Other	4.7 2.8 4.1 44.2 9.0 2.3 1.2	11. 2 8. 7 2. 5 3. 8	26. 5 18. 6 13. 3 5. 9 93. 9 19. 4 5. 8 2. 5	24. 2 20. 4 17. 7 2. 7 3. 8 44. 6 6. 1 1. 7	34. 2 31. 9 2. 3 3. 6	62. 0 54. 6 49. 5 5. 0 7. 4 89. 5 7. 8 1. 3 1. 5	46. 4 42. 6 40. 3 2. 3 3. 8 44. 1 . 7	48. 5 44. 8 42. 3 2. 6 3. 6 48. 8 1. 3	94.8 87.4 82.5 4.9 7.4 93.0 2.1 1.5	50. 5 46. 7 43. 7 3. 0 3. 8 47. 4 . 9 . 8	48. 9 45. 3 42. 6 2. 7 3. 6 52. 0 . 9 . 8	99. 4 91. 9 86. 3 5. 6 7. 4 99. 4 1. 8 1. 6	22. 7 14. 8 9. 3 5. 5 7. 9 90. 4 18. 5 5. 1	30. 4 22. 5 17. 3 5. 2 7. 9 97. 5 20. 2 5. 4	11.7	75.8 68.5 63.7 4.8 7.3 88.1 3.6 2.0	92. 4 85. 0 80. 5 4. 4 7. 4 90. 9 1. 6 1. 5	89.9	100. 6 93. 2 87. 4 5. 8 7. 4 96. 8 1. 2 1. 6	98. 1 90. 7 85. 2 5. 5 7. 4 101. 9 2. 3 1. 6
12 13 14 15	Producers' durable equipment  Net change in business inventories  Net exports of goods and services  Net exports and monetary use of gold	4.7 1.3	4. 3 2. 2 . 9	8. 9 3. 5 1. 5	3. 3 1. 1 (²)	1.9 -1.6 .2	5. 1 5 . 2	1.4 6 7		3.1 6 -1.8	1. 9 5 -1. 3	•	4. 0 -1. 7 -2. 1	9. 3 2. 7 1. 3	8. 6 4. 3 1. 7		-2.5	2.8 -1.2 -1.4		$ \begin{array}{c c} 3.8 \\ -1.6 \\ -2.7 \end{array} $	4. 2 -1. 9 -1. 5
16 17 18 19	and silver	4.5	39. 4 4. 6 21. 9 12. 9	. 2 74. 6 9. 1 40. 1 25. 4	38. 5 2. 9 21. 9 13. 6	(2) 43. 4 3. 4 26. 0 14. 0	.1 81.9 6.3 47.9 27.6	(2) 43. 4 3. 0 25. 9 14. 5	(2) 47. 5 3. 6 29. 2 14. 7	1 90. 9 6. 6 55. 1 29. 3	(2) 46. 5 3. 0 28. 1 15. 4	(2) 51. 1 3. 7 31. 9 15. 6	(2) 97. 6 6. 7 60. 0 30. 9	71. 9 9. 2 37. 8 25. 0	77. 2 9. 0 42. 4 25. 8	1	(2) 84. 5 6. 3 50. 1 28. 1	(2) 89. 3 6. 5 53. 9 28. 9	1 92.5 6.6 56.3 29.7	(2) 95. 7 6. 5 58. 6 30. 6	99. 6 6. 9 61. 4 31. 3
4	NATIONAL INCOME BY DISTRIBUTIVE SHARES	44.9	E0 6	96. 9	55. 6	66 7	122, 2	71. 5	77 0	149. 4	78. 5	22 1	160. 7	00.0	102.0	114 6	120.0	145 7	152 6	159. 5	161 7
2 3 4 5 6 7 8 9 10 11	Total compensation of employees Salaries and wages Supplements Net income of proprietors Agriculture Nonagricultural Interest and net rents Net corporate profits Dividends Savings	30. 1 28. 1 1. 9 6. 7 2. 2 4. 5 3. 9 3. 6	34. 4 32. 7 1. 8	64. 5 60. 8 3. 7 15. 8 6. 3 9. 6 8. 5 4. 5 4. 0	38. 3 36. 6 1. 7 8. 6 3. 6 4. 0 1. 9 2. 1	45.8	84. 1 80. 8 3. 3 20. 6 9. 7 10. 9	51. 2 49. 6 1. 6 10. 7 5. 0 5. 7 4. 8 4. 8 1. 9 2. 9	55. 2 53. 5	106.3 103.1 3.2 23.5 11.9 11.6	57. 1 55. 5 1. 6 11. 1 5. 1 6. 1	58. 9 57. 3 1. 6 13. 0 6. 7 6. 2	116. 0 112. 8 3. 2 24. 1 11. 8 12. 3	60.0 56.2 3.8 14.4 5.5 8.9 7.8 7.7	68. 9 65. 4 3. 6 17. 2 7. 1 10. 2 8. 2 9. 4	77. 8 74. 4 3. 4 19. 6 8. 9 10. 7 8. 6 8. 5	90. 4 87. 2 3. 2 21. 5 10. 5 11. 1 9. 0 9. 0	102.6 99.4 3.2 23.4 11.9 11.4 9.5 9.7	110. 0 106. 8 3. 3 23. 6 11. 8 11. 7 10. 0 10. 0	114.8 111.6 3.2 24.3 12.1 12.1	117. 1 113. 9 3. 2 23. 9 11. 4 12. 5 10. 8 9. 8
1 2	National income Add: Transfer payments	44.3 1.3	52.6 1.2	96. 9 2. 5 4. 0	55. 6 1. 3	66.7 1.3	122. 2 2. 7 4. 4	71. 5 1. 5	1.7	149. 4 3. 2	78. 5 2. 5	2, 8	160. 7 5. 3								
5 6 7 8 9 10 11	Add: Transfer payments Less: Corporate savings Contributions to social insurance funds Equals: Income payments to individuals 2 Less: Personal taxes and nontax payments Federal State and local Equals: Disposable income of individuals Less: Consumer expenditures Equals: Net savings of individuals RELATION OF GROSS NATIONAL PRODUCT	1.2 42.6 2.3 1.3 1.1 40.3 35.2	1. 4 50. 1 1. 7 .8 .9 -48. 5 39. 4	2.6 92.7 4.0 2.0 2.0 88.7 74.6	1. 5 53. 3 4. 1 3. 0 1. 1 49. 2	1.7 64.0 2.6 1.7 .9 61.4 43.4	3. 2 117. 3 6. 7 4. 7 2. 0 110, 6	2.9 1.8 68.2 7.8 6.7 1.1 60.4 43.4 17.0		3, 8 143, 1 18, 5 16, 6 2, 0	3. 0 2. 0 76. 3 11. 5 10. 3 1. 1 64. 8 46. 5 18. 3	7.8 6.9	156.8 19.3 17.2 2.0	86. 8	98. 6	110.0	124.7	138. 9	147.2	155. 5	158.0
12345678	National income 3 Business tax and nontax liabilities Depreciation and depletion charges Other business reserves Capital outlay charged to current expense Inventory revaluation adjustment Adjustment for discrepancies Gross national product or expenditure	8.4 3.4 .4	3.6 .4 .7 —2.0 —.7	96. 9 18. 5 7. 0 .8 1. 3 -3. 2 8 120. 5	55.6 10.9 3.8 .3 .6 -1.5 -1.0 68.8	3.8	7. 6 . 7 1. 1 —2. 1	71. 5 13. 3 4. 1 1 +1. 0 90. 5	14. 1 4. 1 . 3 . 4 1 +. 6	8. 2 . 7 . 8 . 2	14.3 4.2 .3. .4 1 +.1	15.0 4.2 .3 .4 —1.2	160.7 29.3 8.4 .7 .9 1 1.1 198.7								

Detail will not necessarily add to totals because of rounding.

Less than \$50,000,000.

Wage payments retroactive to 1943 amounting to 0.2 billion dollars were made to railroad workers under agreements reached in January 1944. These are included in national income for 1943, but in income payments for 1944.

was not confined to the industries directly associated with war production. In spite of individual variations, high earnings were general, spreading to industries that serve the entire economy, such as transportation, as well as to those that cater particularly to civilian consumers, such as retail and wholesale trade.

A rough division of manufacturing into war and nonwar industries shows that although the profits of the former have increased more rapidly during the war, the difference is by no means striking. The over-all picture is not very different from what it might have been in the course of an ordinary cyclical upswing in which the relative profit position of the heavy industries, of which war industries largely consist, regularly improves.

The high level of profits was reached and maintained in spite of a heavy increase in Federal corporation income and excess profits taxes. These are estimated at about 15 billion dollars in 1944, a more than tenfold increase as compared with profits before 1939. Thus taxes amounted to 25 billion dollars. This figure is indicative of the volume of profits which present corporate cost-price relationships tend to generate at full production.

Corporations distributed, 4.5 billion dollars in dividends and retained over 5 billions in undistributed profits in 1944. In spite of increases in 1943 and 1944—and notwithstanding rising earnings during the war—dividend payments were still below their 1941 total. Throughout the war dividend disbursements have been conservative. As a consequence undistributed profits, both in absolute terms and in relation to total net profits, have been very high when judged by pre-war standards.

#### Disposition of Incomes.

Income payments to individuals, which differ from national income by excluding corporate savings and contributions to social insurance funds, and by including Government transfer payments, amounted to 157 billion dollars in 1944 (chart 4). This represented a 14 billion increase over 1943 as compared with 11 billion in national income.

During 1944 also, income payments were somewhat more buoyant. This is explained largely by the fact that Government payments to soldiers' dependents and mustering-out pay, which are part of transfer payments, have increased sharply, from one billion dollars in 1943 to almost 3 billion dollars in 1944.

Personal tax payments rose to 19.3 billion dollars in 1944. Substantially the entire sixfold, or 16 billion dollar, increase in these taxes since 1939 was in Federa taxes on individual incomes. Changes in the yield of other personal taxes have not been significant.

In view of the substantial increase in income payments, the gain in these taxes over the 18.5 billions paid in 1943 seems surprisingly small. But in this connection it should be noted, first, that an important part of the additional incomes received in 1944 consisted of military pay and allowances the bulk of which was not taxed.

Secondly, in spite of the adoption of the current tax payments plan, individual income tax payments in 1943 and 1944 did not completely reflect liability on the year's income. Thus, for instance, 1944 collections were reduced owing to the postponement of the payment date of the fourth quarter instalment of the Federal individual income tax from December 1944 to January 1945. There were a number of other substantial adjustments which would have to be made both in the 1943 and in the 1944 collection figures in order to interpret their movement in relation to that of incomes.

In absolute terms personal taxes are large at present. But they are levied upon vastly expanded income payments so that even in 1943 and 1944 they absorbed less than 13 percent of this income. The impression that tax payments are moderate in proportion to incomes is not significantly altered if military pay rolls and allowances to dependents, the bulk of which are not taxed, are excluded. If attention is thus focussed on the civilian economy, the percentage of incomes absorbed is still only 14 percent.

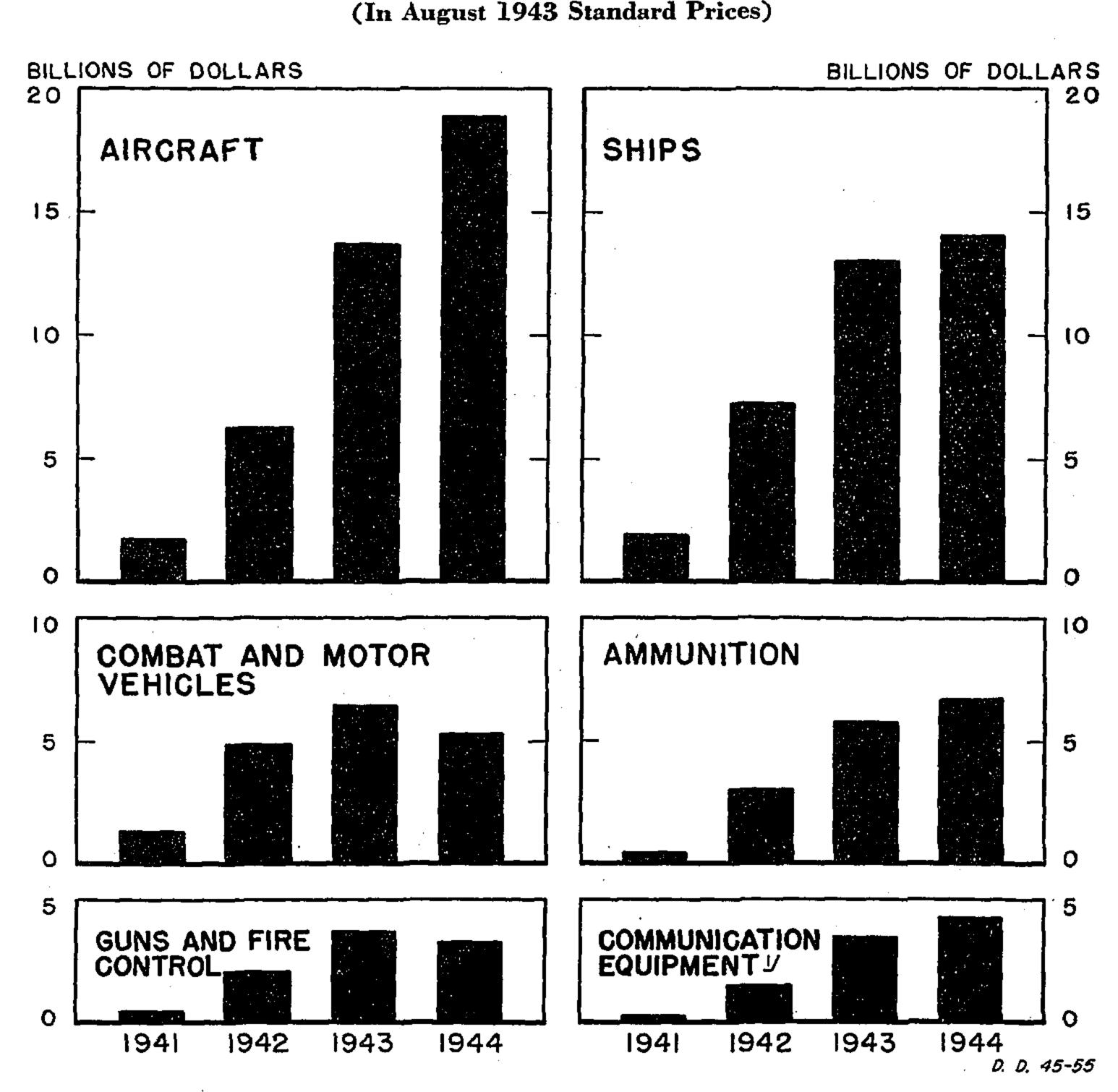
Tax payments have been stationary recently. Quarterly payments of total personal taxes do not reveal this clearly,

because both in 1943 and in 1944 they have moved erratically as the result of administrative changes that attended the transition to the current tax payments plan. But stability is clearly displayed by the monthly data of income tax withheld currently by employers.

Of the 138 billions of disposable income left after taxes, individuals spent 98 billion for consumers goods and services. The remainder, 40 billions, was set aside for savings, an increase of 6 billions over 1943. In interpreting this figure it should be kept in mind that part of it consists of tax reserves of farmers with respect to 1944 Federal income tax liability and also tax liabilities of other tax payers with respect to the fourth quarter of 1944. Payments on these liabilities were due in January 1945, but at most an adjustment for this would not reduce the savings total by as much as 2 billion dollars.

In addition to this factor, a statistical imperfection of the data should be noted. It was not possible to include an estimate of soldiers' and sailors' expenditures abroad in the consumer expenditure figures. Since the incomes of the armed forces are included in income payments, savings, which are obtained as residual by deducting taxes and consumer ex-

Chart 5.—Munitions Production, by Major Groups



<sup>&</sup>lt;sup>1</sup> Data are for communication and electronic equipment. Source: Facts for Industry, War Production Board.

penditures, are accordingly over-stated. Though the omission does not alter the fact of high personal savings, it does result in some overstatement of the volume of savings in recent years and also distorts its movement.

#### Munitions Production

The flow of munitions in 1944 represented the culmination of 4 years of sustained effort which had adapted mass production techniques of the peacetime economy to pouring out vast quantities of war matériel. Turning out this larger output in 1944 was in many respects an easier task than that accomplished in the 2 preceding years because, with the organizational and initial production stages well behind, it was more efficiently conducted.

#### Increased Efficiency.

This increased efficiency reflected the more extensive use of newly developed facilities; the broadened labor skills; the enlarged experience of labor and management with new techniques; the better organization of the flow of materials, components and intermediate products; and a firmer knowledge of the resources of men, materials and facilities required for a given volume of output.

Evidence of this improvement was provided by the more effective use of raw and semi-finished materials and, importantly by reason of the continued increase in the armed forces, by the more effective use of manpower.

During the year the number of persons employed in turning out munitions was steadily reduced—by December the total employment in munitions industries was 9.1 million or 11 percent less than at the end of 1943. The average number employed was cut from 10 million in 1943 to just over 9½ million in 1944, and this notwithstanding the higher output.

This manpower saving reflected in part the declining rate of operations in some plants as schedules were reduced, but the basic cause was the more efficient use of labor in these factories and in the plants with steady or rising schedules. The trend freed a substantial supply of labor which was available for employment in plants where labor requirement was still

#### increasing.

## Output Up One-eighth.

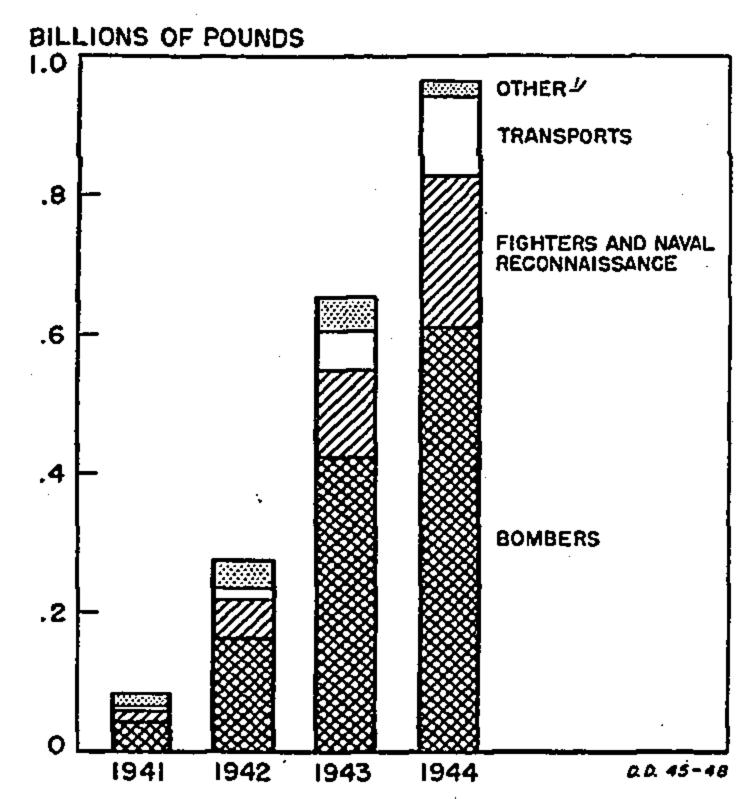
Total output of munitions in 1944—in terms of the August 1943 standard munitions prices used by the War Production Board for measuring production was 63.7 billion dollars, an increase of 12 percent over the output of 1943. The chart on page 1 reveals the swift rise in 1942 and 1943, when the needs for all sorts of weapons and equipment were universal.

The increase last year was not so large and mirrored the lessened pressure for many items. In fact, it resulted from the maintenance of a high volume of output throughout the year, rather than a further expansion beyond the final quarter of 1943.

Thus, 1944 may be characterized as the maturity phase of the program, with the initial equipment of the armed forces substantially completed and with the

## Chart 6.—Production of Aircraft, by Type

#### (Data Represent Airframe Weight)



<sup>1</sup> Includes trainers and communication and special purpose aircraft.

Source: Facts for Industry, War Production Board.

major emphasis shifted to expendable items, and to the new and improved weapons needed to replace obsolete equipment or to meet the new conditions as the war fronts were advanced to the crucial enemy areas.

Comparative war production for the past four years, by major categories, is presented in Chart 5. All of the munitions output is included in this series of grids, except the "all other" group which, if plotted, would follow the same relative trend as indicated for the total for all programs in chart 1. War construction, not included in either chart, in 1944 was less than one-fourth of the 1942 total and considerably less than two-fifths of the 1943 expenditures.

#### Shifting Pattern.

Note that all groups moved ahead in 1942 and 1943 at very substantial, though varying, rates. But in 1944, with many requirements statisfied, and sustained production in such lines no longer required, the trend was mixed.

In only one major group—aircraft was the total output for the year markedly higher than in 1943, and even here the rise reflected the rapid upward swing until March. Subsequently the decline in requirements resulted in an easing of the pressure for many types of planes, which freed facilities, manpower, and materials for transference to the expanding plane programs or for other use.

For aircraft, the year-to-year increase over 1943 was 12 percent in number and 47 percent in weight. Chart 6 reveals not only that bombers were nearly two-thirds of the total output last year, but also that trainer planes made up a declining percentage, and transports a substantially larger proportion.

The flow of trainers, of course, was geared to the program of activation of the air forces. The cargo planes were up not only to meet the enlarged requirements for direct use by combat and other troops, but to service the world-wide supply system of our own forces and those of our Allies. A case in point is the China supply system which will stand as an epic of this war.

#### Plane Output Up.

Total output of planes in 1944, in terms of numbers, was 96,356, compared with 85,930 in 1943. This relatively smaller increase in numbers than in the weight mentioned in the preceding paragraph and shown on chart 6, is an indication of the higher average weight per plane, in part the result of the drop in the trainers. The long-range heavy B-29 bomber made up an increasing proportion of the output during the latter part of the year which period also brought expansion in acceptance of other new types of planes, and in the development of advanced models for production in 1945.

#### Ships Slightly Higher.

Turning back to chart 5, it may be noted that there was a slight increase in the aggregate output of ships, inclusive of merchant and naval craft. This comparatively stable total is the composite result of very considerable shifts among the different types of vessels.

In the Navy program, this shift was away from the antisubmarine vessels toward the landing craft needed for the 1945 and 1946 offensives. Among the merchant types, it was away from the Liberty vessels to the faster cargo ships and to military types. These latter required a larger resource input per ton of ship capacity than was the case in the 3 preceding years when there was a high premium upon carrying capacity and the mass-produced Liberty provided the answer.

The control of enemy submarines by the armed forces of the United Nations was the equivalent of adding millions of tons of new ships to the fleet in 1944.

#### Ammunition Rising.

Next to aircraft, the largest absolute rise was in the ammunition group. Again this change resulted from sharply divergent movements among major types of ammunition, with particularly large increases in the aerial bombs needed by both the strategic and tactical air forces. Towards the latter part of the year the stress was on the heavy artillery shells and rockets, with some of the small arm lines being brought back into production after the widespread shut-downs following the attainment of the peak of this program in the summer of 1943.

The increase in communication and electronics equipment, though smaller in absolute volume than that for ammunition, was relatively larger. This section of the program is one of rapid technological development, and considerably enlarged totals of improved and newly developed equipment were turned out in 1944 for ground and air forces, as well as for the ship program.

## Some Production Declines.

Declines in production in two of the major programs offset in part the 1944 increases in the others. There was a large reduction in the combat and motor

vehicle group, entirely due to the cutbacks in the combat vehicles—tanks, armored and other cars, and personnel carriers.

The peak monthly output of tanks was in 1942, the subsequent low point in early 1944 being followed by a moderate rising tendency as the output of the latest models expanded. The largest trucks, which were in particularly urgent demand after the Normandy breakthrough in France, were on the critical list in 1944 and were subjected to extensive expediting efforts.

The other declining group was made up of the guns and fire-control equipment. Here again there was considerable divergency in production, with certain equipment, such as heavy field artillery, naval guns, and rocket launchers, being pushed ahead, while the output of other equipment was scheduled down.

The requirement for new anti-aircraft guns, for example, was lessened as the fighting fronts pushed far into enemy territory and by the effectiveness of the air arm and other combat forces in whittling down enemy air strength. The last one—the 40 mm. AA Navy gun—went off the special expediting list at the end of the year, together with the combat loaders—converted merchant ships for Navy use.

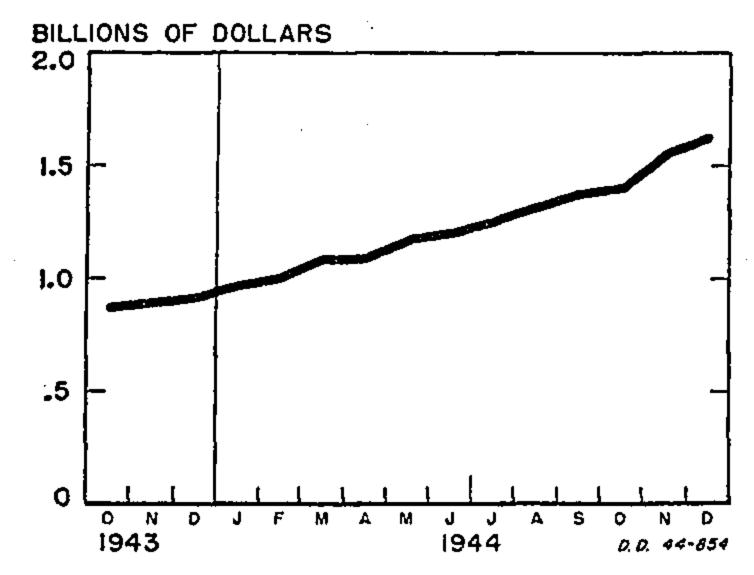
#### Current Situation.

The past year was, therefore, one of sustained high output, with widespread shifting of individual schedules which meant dislocations and change for manufacturers and employees alike. That is the character of the situation at present, and is likely to continue thus so long as both Germany and Japan continue to postpone their inevitable surrender.

It is not necessary in this annual number to review the present status of the production program, except to bring the record up to date. The status was reviewed in some detail in the December 1944 issue, pages 4 to 7. The analysis given therein is still valid today. Since then changes have been made in production plans which will require additional expansion in output of certain lines in 1945.

## Chart 7.—Munitions Production Programs With Scheduled Peaks Ahead

(In August 1943 Standard Prices)



Source: War Production Board.

The general picture, however, will continue to be, as set forth in the chart on page 5 of the above-mentioned issue, one of both rising and falling programs.

The year 1945 is the first of the war program in which the job ahead is not larger than the one accomplished in the preceding year.

The basic production problem in 1945 will be to secure increasing quantities of new and improved equipment, to synchronize the output of special-purpose equipment to the timing of its use, and to gear the production of ammunition and other expendable items, not only to the rate of use but to the size of the stockpiles required to meet anticipated future use.

For most of the program, special efforts to secure the desired output will not be required. Actually, production of many items is scheduled down because requirements no longer make necessary the flow of equipment or supplies at the current rate. Where increased quantities of munitions are needed, they will be forthcoming.

Selective pressure will be essential, but the ways and means of meeting the needs where expansion is required are essentially no different from those necessary in 1942 and 1943, except that in these earlier periods resources devoted to munitions had to be expanded in the aggregate, with the competition which general need extending over practically all programs entailed.

Now, ample resources are available for the total program and the problem narrows, therefore, to diverting the requisite amount to the expanding programs, and getting the output in these segments organized on a mass production basis. That such, in fact, is being done is evident from the recent strong upward trend of output in the expanding programs. In the final 2 months of 1944, the average expansion in the programs with peaks yet ahead was almost double the rate for the earlier months of the year.

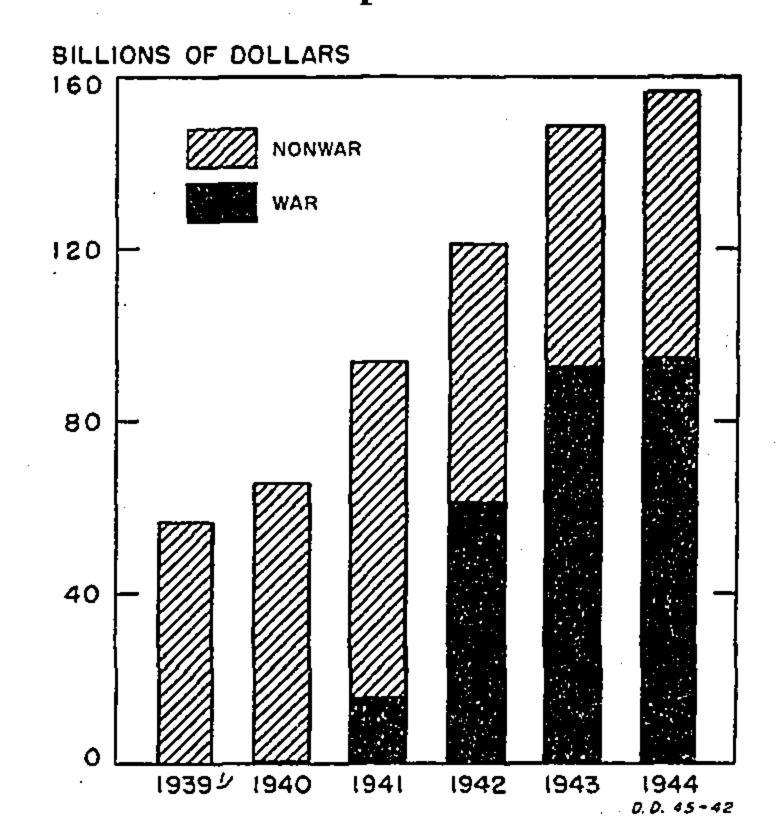
The sharp upsurge at the year-end in the critical programs is reflected in chart 7. The December increase in output of the planes on the critical list—Superforts and other advanced types—was over 30 percent. The heavy-duty trucks, tanks, and heavy field artillery were each up 10 percent or more, and heavy artillery ammunition was up to 2 percent. The total munitions flow in December—5,237 million dollars in standard prices—was at an annual rate just under 63 billion dollars.

## Manufacturing Activity

In general the requirements for munitions and other supplies for the armed forces and for our allies, as well as the allocation of resources to assure the procurement of these supplies, determined the pattern of manufacturing activity.

The needs of the armed forces and exports extended into almost every phase of manufacturing, with over three-fifths of the total output delivered for these purposes. The maturing of the munitions program and the limits placed on the total resources allotted to manufacturing are reflected in the plateau of aggregate shipments established in 1944. Shipments during the year were main-

## Chart 8.—Manufacturers' Shipments



<sup>1</sup> Total includes war portion of less than \$300,000,000.

Source: U. S. Department of Commerce.

tained at a rate only slightly in excess of that achieved in the last 3 months of 1943.

Compared with the rapid expansion of sales reported in 1942 and 1943 the yearly rise for 1944 was modest. The gross value of goods shipped by manufacturing concerns during the year is estimated at 157 billion dollars, a gain of 5 percent over 1943 and nearly three times the 1939 value.

The increase in quantities of goods delivered from 1939 to 1944 was impressive, even though not so large as the gain in dollar sales, since prices also increased. However, over-all price changes from 1943 to 1944 were slight and did not fully account for the gain in dollar sales.

It may be noted that the gross value of goods shipped includes double counting resulting from inter-company transfers. The net value would, of course, be much less—in peacetime periods roughly two-thirds of the gross shipments.

The character of the shifting pattern within manufacturing is illustrated by a comparison of the changing rate of expansion of the output of durable and nondurable goods. Deliveries of the durable and nondurable goods industries in 1944 are estimated at 90 billion dollars and 67 billion, respectively.

As between these two broad segments of manufacturing, the durable goods industries have, during most of the war period, exhibited the more rapid growth of shipments. However, in 1944 shipments of both groups rose at nearly the same rate over 1943—about 5 percent—as compared with the 1942–43 rise of more than 30 percent for durable and about 10 percent for nondurable producers.

The slackened rate of increase in durable goods reflects the fact that few new manufacturing plants were brought into production in 1944 and that the utilization of existing facilities was not changed materially under prevailing conditions with respect to the volume of

output required as discussed in the preceding section on munitions. The increase for the nondurables reflects the rise in food processing and such factors as the increase in the petroleum products required for the armed forces (chart 8).

Most of the new manufacturing facilities constructed during the war have been located in the durable goods industries, and it was this which provided the basis for the rapid sales expansion through 1943 set forth in chart 20. With most plants built and in operation by the end of 1943, and with many plants being cut back from peak rates of activity, this differential rate of expansion between the two industry groups largely disappeared. Moreover, certain of the new nondurable facilities, notably for synthetic rubber and aviation gasoline, were brought into full production in 1944.

The percentage distribution of manufacturers' shipments between war and civilian use was practically unchanged from the preceding year. The estimated ratio of military and export deliveries to the total was slightly more than three-fifths in both 1944 and 1943. The rise of shipments destined for war purposes from 91 billion dollars in 1943 to 96 billion in 1944 (including inter-plant transfers) is in sharp contrast to the rise of about 30 billion dollars which occurred from 1942 to 1943.

The war portion was less stable for individual industries than for manufacturing as a whole. The military share declined slightly in the metal producing industries and in certain of the machinery industries, while it rose in the food, tobacco, and lumber industries.

Table 3.—Manufacturers' Shipments

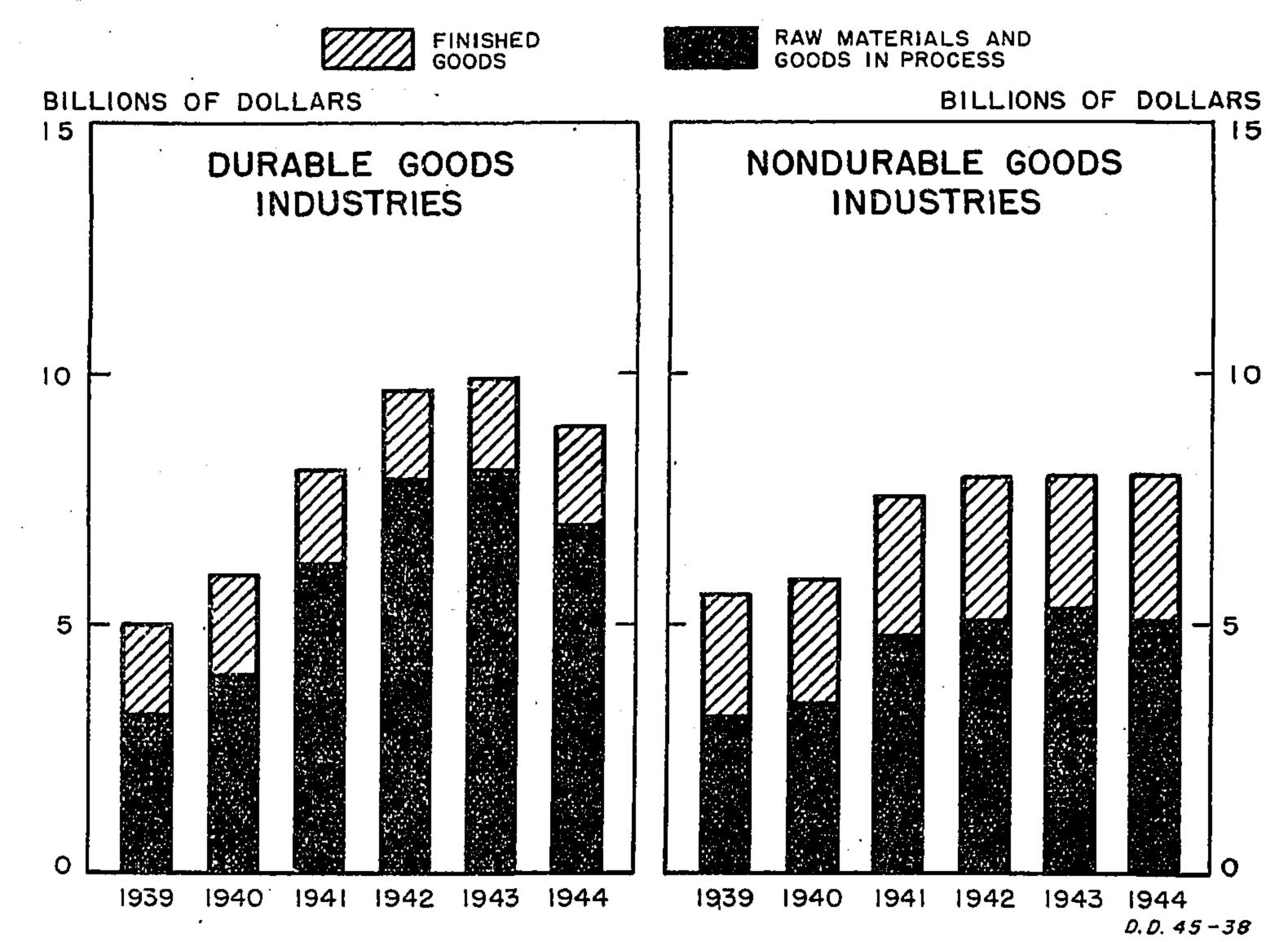
[Billions of dollars]

Industry	1930	1942	1943	1944 1
Total, all industries	56.8 23.2	121. 2 64. 8	148. 8 86. 4	156. 6 89. 6
Iron and steel and their products	6.6	15.3	16.5	16.5
Nonferrous metals and their productsElectrical machinery	$\frac{2.6}{1.7}$	5. 5 4. 8	6.7 7.5	7. 2 8. 8
Machinery (except electrical)	3.3	10. 7	13. 3	13. 2
Automobiles and equip- ment	4.0	6.9	10.9	12.4
ment (except autos) Lumber and timber basic	.9	13.6	22. 7	22.3
products	1.1	2.5	2.6	2. 4
lumber products Stone, clay, and glass	1.3	2.2	2.5	2.8
Miscellaneous.	1.4	2.6	2. 7 1. 0	2. 7 1. 1
Nondurable goods indus- tries Food and kindred prod-	33.6	56.4	62.4	67.0
uctsTobacco manufactures	10.6 1.3	18.8 1.8	20.6 2.0	22. 8 2. 2
Textile-mill productsApparel	3. 9 3. 3	7.8 5.2	8.1 5.2	7. 6 5. 1
Leather and leather products	1.4	2, 4	2.3	2. 4
Paper and allied prod- ucts Printing and publishing	2.0 2.6	3. 1 3. 4	3. 4 4. 1	3, 6 4, 9
Chemicals and allied products	3.8	6.5	7.5	7.9
Products of petroleum and coal	3.0	4.2	4.8	5.6
Rubber products Miscellaneous	.8	1.6 1.6	2. 5 1. 9	2.8 2,1

<sup>1</sup> Preliminary,

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Chart 9.—Manufacturers' Inventories, End of Year



Source: U. S. Department of Commerce.

#### Reconversion Steps.

Due to changes in war programs and aid in the attainment of rapid rates of increase in the critical programs, the tentative reconversion steps taken in the late summer were modified by the end of the year. The War Production Board early in December adopted the policy of granting no "spot authorizations" in group 1 (and certain other) labor areas for 90 days. In the middle of the month it was announced that, in general, programs for the manufacture of civilian items would be restricted to the amount allowed during the fourth quarter of 1944.

In general, the nature of the year-end modifications of the reconversion program was to postpone, rather than prohibit, some of the preliminary steps and to prevent the continued expansion of these activities for the time being.

The net effect of the reconversion steps had little effect on the composition of manufacturing output in 1944. The increases in civilian durable goods that did take place last year came as a result of programming actions and were confined to the war-supporting products, such as farm equipment. However, these, were also a minor part of the total.

#### Durable Goods.

Notwithstanding the comparatively small movement of total manufacturers' shipments in 1944, the mixed trends among individual industries included some sharp changes. Among the important war producing durable industries, the electrical machinery and automobile groups registered sales increases

of 17 and 14 percent, respectively, over 1943, as compared with virtually no change in the deliveries of the equally important transportation equipment (excluding automobiles) and machinery (other than electrical) industries.

Billings were virtually unchanged for the iron and steel industry which produced during the year about 89.6 million net tons of steel ingots and steel for castings, less than 1 percent above 1943.

Despite continuing heavy military demand for its products and increases in the wholesale prices of lumber, the dollar value of shipments of the lumber and basic timber products industry declined by 8 percent. The 1944 sales of the furniture and other finished lumber products industry rose one-eighth over 1943, about 35 percent going for war purposes. Price advances were an important factor in this increase.

The metal manufacturing industries were almost exclusively concentrated on munitions production, the analysis of which was presented above.

#### Nondurable Goods.

Although the products of the non-durable goods industries have been devoted chiefly for civilian use, the further advance during 1944 of shipments from firms in these industries did not comprise any substantial increment to civilian supplies. Most of the gain represented military deliveries.

The largest gain among the nondurables was registered by a 22-percent rise in the petroleum refining industry.

Total output of motor fuel which averaged 50 million barrels per month in 1943 increased to more than 60 million

Source: U.S. Department of Commerce.

barrels per month for 1944 as a whole, and in the last months of the year motor fuel was being produced at a rate in excess of 65 million barrels per month. However, civilian supplies of gasoline remained tight in 1944 since production of military products, especially aviation gasoline, constituted the major portion of the increase, which occurred in part at the expense of automobile fuels.

Because of increasing military purchases of such items as paperboard containers, heavy duty tires, and cigarettes, it was similarly true that the fairly substantial sales increases of the rubber, paper, and tobacco industries during the year produced no addition to civilian supplies.

The dollar value of the leather industry's shipments in 1944 were nearly identical with the preceding year. Leather product prices also were unchanged. Production of leather shoes for the Government increased from 47 million to 50 million pairs, and a growing proportion of this output was composed of the high cut combat shoe which requires several times the leather needed to make an ordinary civilian shoe.

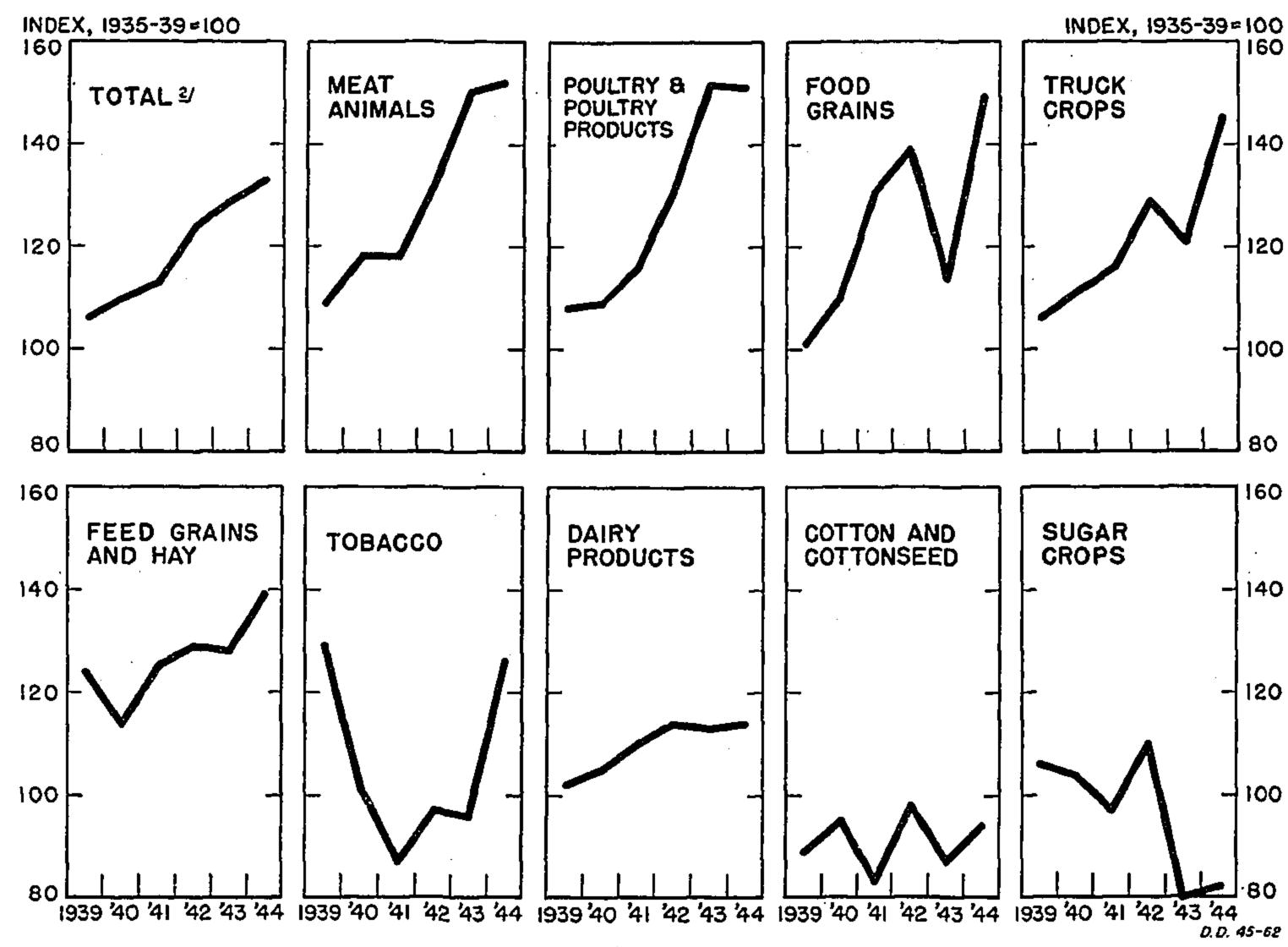
With supplies of leather available to shoe manufacturers about the same as in 1943, production of civilian leather shoes was reduced from 314 million pairs in 1943 to less than 270 million pairs last year, the lowest point during the war. The effect upon consumers of this reduction was cushioned to some extent by a further increase in the production of fabric shoes, primarily women's styles, and a reduction of trade inventories.

The only nondurable industry to record a substantial decline in shipments during 1944 was the textile industry. Its dollar sales fell 6 percent despite a price increase for cotton goods granted by the Office of Price Administration in the middle of the year. The decline has been centered in the cotton textile portion of the industry where production of cotton broad woven goods in 1944 is estimated at no more than 10 billion linear yards as against 10.7 billion in 1943.

## Inventories Reduced.

The expansion of two-thirds in the book value of manufacturers' inventories which accompanied the growth of production between 1939 and 1943 was terminated in the latter year. During 1944, manufacturers reduced their inventory holdings by about 5 percent, and

Chart 10.—Volume of Agricultural Production for Sale and for Farm Home Consumption <sup>1</sup>



<sup>1</sup> Indexes for 1943 are preliminary; those for 1944 are tentative, based upon December estimates of agricultural production.

<sup>2</sup> Includes some commodities not shown separately in chart.

Source: U. S. Department of Agriculture.

the value of stocks as of December 31 is estimated at less than 17 billion dollars, the lowest point since early 1942.

Chart 9 indicates that the accumulation of inventories prior to 1943 was not only substantially heavier in the durable goods industries but that the liquidation in 1944 has been entirely confined to this group of industries. At the end of 1943 inventories of durable producers were valued at nearly 10 billion dollars or twice the 1939 level, while the 8 billion dollars held by nondurable producers represented only about one and one-half times their pre-war inventories.

By the end of 1944, inventories of durable goods producers had declined to 9 billion dollars, about 10 percent below the end of the preceding year, while inventories of nondurable producers remained unchanged.

Stabilization of war production in 1944 explains the end of inventory accumulation in 1943. The gradual but steady decline of manufacturers stocks since then can be attributed at least in part to increased efficiency in production of war goods and improved materials control.

#### Agricultural Production

The flow of commodities from the Nation's farms in 1944 was large enough to allow the highest civilian per capita food consumption in the Nation's history, and at the same time to devote almost a quarter of available supplies to the needs of our armed forces and allies. It was thus even more true in agriculture than elsewhere in the economy that in general productive facilities adequately met the requirements of the Nation at war.

Civilian per capita consumption of food in 1944 was 9 percent above the 1935-39 average. Moreover, the wartime increases have been accompanied by a general improvement in the nutritive content of the national average diet and, apparently, by some reduction in the disparity among the diets of various segments of the population.

The physical volume of farm output in 1944 exceeded the 1943 total by 3 percent, continuing the upward production trend which has featured each year since 1939. The 25 percent rise in total farm output during this 6-year period was achieved notwithstanding a net decline in farm employment and an increase in crop acreage limited to only 6 percent.

Stimulating all-out production and directing agricultural effort into products

Table 4.—Manufacturers' Inventories by Stages of Fabrication

[Millions of dollars]

	То	tal invento	ries	F	inished goo	ds	Raw material and goods in process			
End of—	Total,	Durable	Nondura-	Total,	Durable	Nondura-	Total,	Durable	Nondura-	
	all in-	goods in-	ble goods	all in-	goods in-	ble goods	all in-	goods in-	ble goods	
	dustries	dustries	industries	dustries	dustries	industries	dustries	dustries	industries	
1939 1942 1943 1944:	10, 659 17, 652 17, 769	5, 046 9, 741 9, 870	5, 613 7, 911 7, 899	4, 255 4, 597 4, 390	1,848 1,826 1,776	2, 407 2, 771 2, 614	6, 404 13, 055 13, 379	3, 198 7, 915 8, 094	3, 206 5, 140 5, 285	
March June September December	17, 562	9, 607	7, 955	4, 574	1,898	2, 676	12, 988	7, 709	5, 279	
	17, 229	9, 441	7, 788	4, 685	1,989	2, 696	12, 544	7, 452	5, 092	
	17, 139	9, 218	7, 921	4, 797	1,922	2, 875	12, 342	7, 296	5, 046	

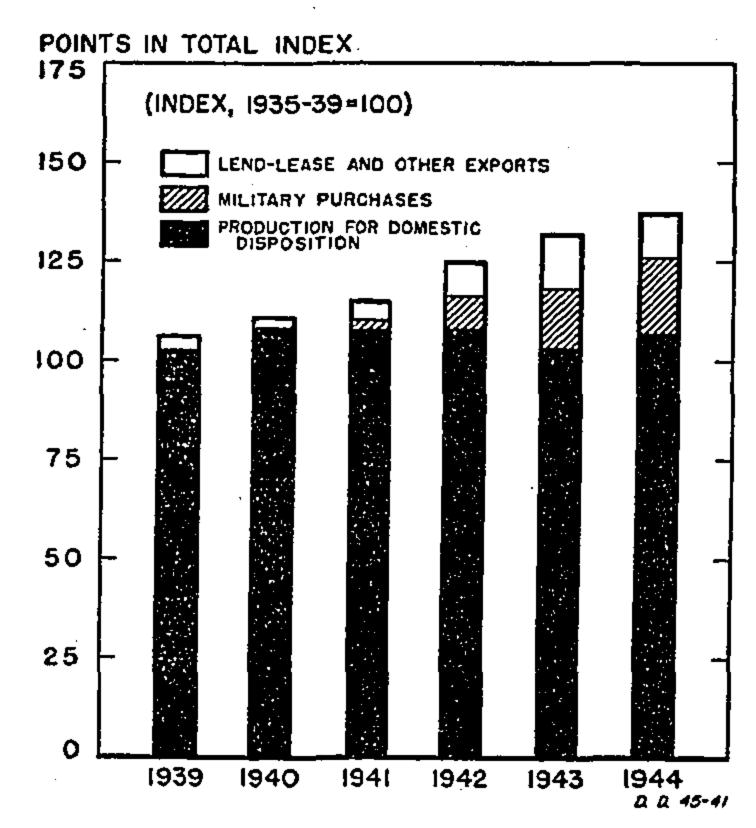
Source: U.S. Department of Commerce.

most urgently needed were Government actions reflected in the setting of national production goals, broken down on a State and county basis, and in price policies permitting advances and guaranteeing minima for major farm products. The index of prices received by farmers more than doubled between 1939 and 1944 and averaged 15 percent above parity last year.

#### Factors Increasing Production.

Perhaps the most important single factor responsible for the wartime expansion in agricultural output has been the unusually favorable weather. There were other important contributing factors, however, which were not fortuitous in origin, not the least important of which was the increased allocation of resources to the production of farm equipment.

#### Chart 11.—Allocation of Total Food Production <sup>1</sup>



<sup>1</sup> Production for domestic disposition for 1939 and 1940 includes small amounts of military purchases.

Source: U. S. Department of Agriculture.

Rapid strides have been made in farm mechanization during the war years as indicated, for example, by the one-third increase in the number of tractors on farms since January 1, 1940. Not only did these additional machines enable farmers to handle larger crop acreages per worker, but the accompanying decline in the number of work animals released cropland previously used for feed purposes. Mechanization was also furthered by substantial additions to the number of such key equipment as milking machines, combine harvesters, and corn pickers. In order to keep farm equipment operating, production of spare parts has been boosted substantially.

Finally, a part of the increased output can be attributed to such technological advances as improved varieties of crops, better rotations, and more balanced livestock feeding, to the greater use of fertilizers, and to earlier soil conservation programs.

The net effect of these developments has been a 34 percent increase in output

per worker since 1939 and a 16 percent increase in average crop yields per acre harvested.

#### Contrasting Production Trends.

The trends in total agricultural output since 1939 and in the output of the major commodities are contrasted in chart 10. The divergent production patterns are largely the result of the two control techniques relied upon by the Government—the promotion of production goals for the various crops, livestock, and livestock products and the establishment of price supports providing adequate financial incentives for increased output.

Oil-bearing crops (not shown in the chart) experienced by far the largest growth during the war. By 1943, the combined production of soybeans, peanuts, and flaxseed had expanded 135 percent relative to 1939. A substantial drop in flaxseed output in 1944 reduced the production of oil-bearing crops to 80 percent above 1939. This large growth served to more than offset the decline in imports.

Notable wartime gains were also experienced in the production of such major food products as meat animals, poul-

try and poultry products, food grains, and truck crops. Production of dairy products showed a milder uptrend, reflecting the less elastic supply conditions in the dairy industry, while sugar crops declined relative to prewar output.

The rapid expansion of livestock production was made possible by the increased annual output of feed grains and hay, as augmented by large carryovers of feed crops from earlier years. Within the meat group, the largest increases were recorded by veal and pork. The production of various types of meat is shown in table 5.

Table 5.—Meat Production by Types

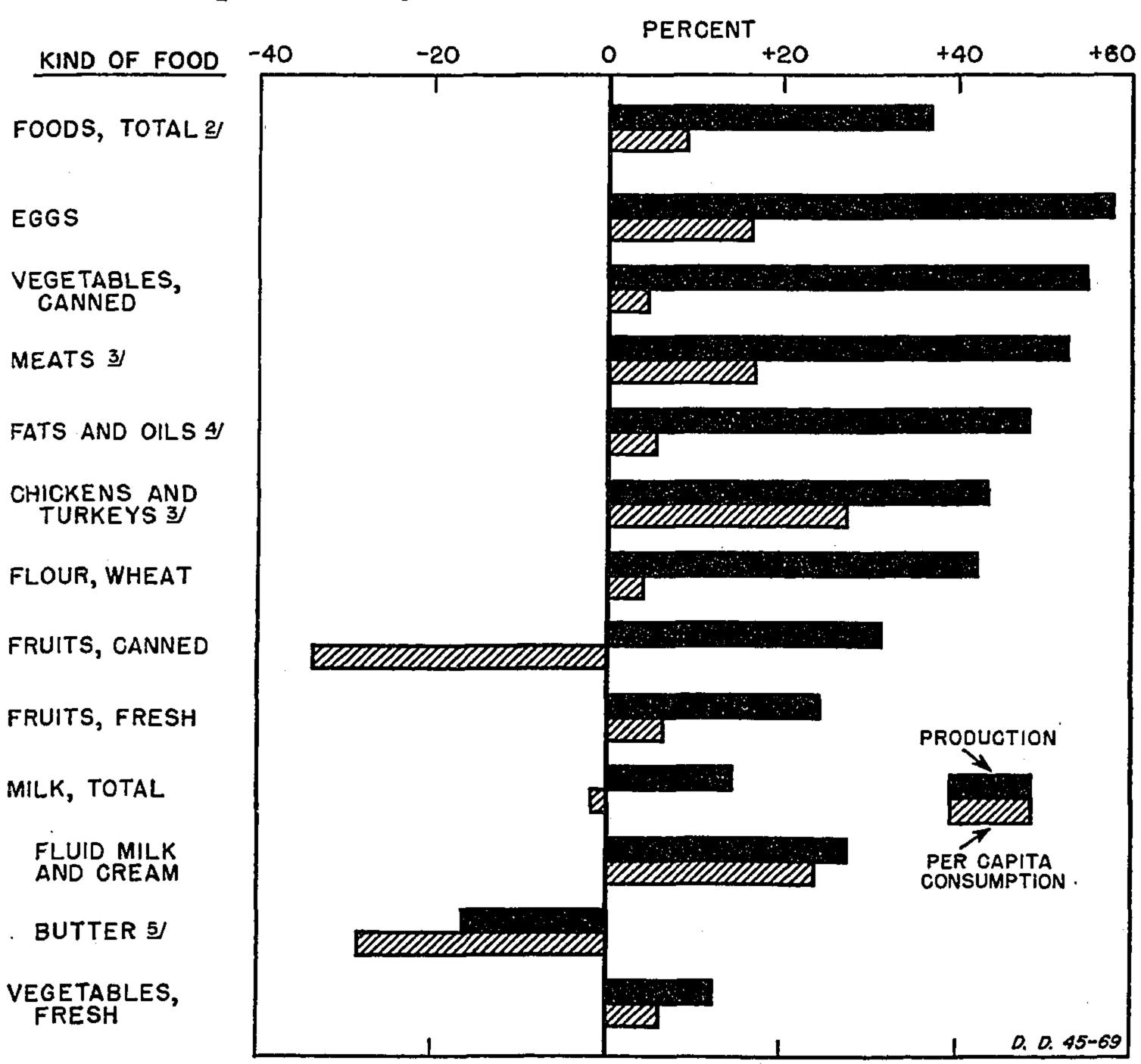
[Millions of pounds, dressed weight]

	1939	1940	1941	1942	19431	19441
Veal	991	I 978	11. 029	1, 139	8, 536 1, 142 1, 107 13, 371	1,700

Preliminary.

Source: U.S. Department of Agriculture.

Chart 12.—Percentage Change in Production and Per Capita Civilian Consumption of Major Foods, 1944 From 1935–39 Average <sup>1</sup>



Data are on a calendar year basis except for canned fruits and vegetables, which are for the pack year beginning in the year designated, and citrus fruits, which are for the crop year beginning in October of the previous year.

Source: U. S. Department of Agriculture.

<sup>&</sup>lt;sup>2</sup> Excludes lard.

<sup>2</sup> Total includes some foods not shown separately in chart.

Percentages are based upon dressed weight.

Excludes butter which is shown separately in chart.

Includes farm and factory production.

None of the nonfood groups increased appreciably during the war. Cotton and cotton seed production has fluctuated within a relatively narrow range and to-bacco output, although larger than in any of the previous 4 years, was still slightly below the record output in 1939.

#### Civilian Food Consumption at Peak.

Annual food production, together with the amounts purchased for the armed forces, Lend-Lease and other exports, is shown in chart 11. As was to be expected, most of the increase in production between 1939 and 1944 has been absorbed by the greatly expanded takings of the military and export agencies. Military purchases aggregated over 14 percent of 1944 food output; Lend-Lease shipments and other exports 7 percent.

Despite the large diversion from domestic civilian channels, 1944 production was sufficient to raise per capita civilian food consumption to the highest on record—9 percent in excess of the 1935–39 average. Chart 12 contrasts wartime changes in production and civilian consumption of all foods and of major food groups. The divergences between the changes in production and consumption are chiefly due to the military and export requirements.

Consumption of such important foods as meats, eggs, fluid milk, and chickens showed considerably larger increases relative to pre-war amounts than did the over-all food consumption index. The major exceptions to the general pattern were canned fruits, sugar (not

shown in the chart), and dairy products other than fluid milk and cream. Butter production in 1944 was the lowest since 1921, largely because other dairy products have afforded more profitable outlets for milk production in recent years.

#### Over-all Adequacy of Food Supplies.

It is clear that wartime food shortages reflect to a greater extent the expansion in effective demand generated by high income rather than actual reductions in supplies available to civilian consumers.

In addition to the unprecedented improvement in the average civilian diet and the probable lessening of the disparities in food consumption among the population, the industrial feeding program sponsored by the Government has stimulated management to provide adequate meals on the job for many more workers. Prior to the war less than one-fifth of the workers in manufacturing plants were obtaining meals at work. As the result of installing new feeding facilities and improving operation methods, this ratio now exceeds 40 percent.

#### Raw Materials

Materials did not play a dominant role in war production during 1944 since the control mechanisms perfected in 1943 insured an adequate supply for this purpose. The availability of materials for other production continued to be limited, but this was only one of the factors de-

termining the flow of output of non-military goods.

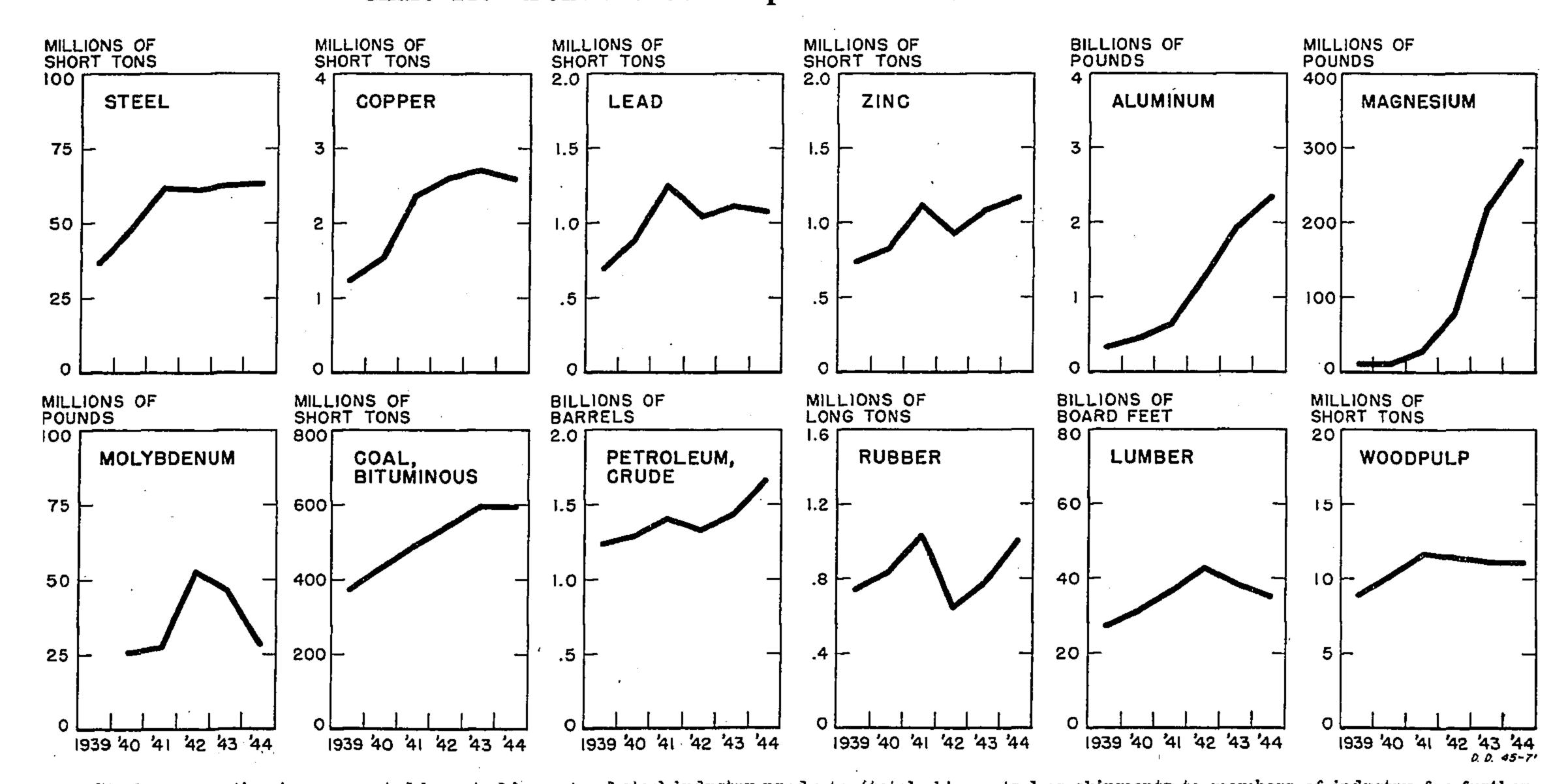
In the case of aluminum, where production was cut back in a series of reductions, it was obvious that added production of aluminum goods was possible from the standpoint of the availability of raw material alone.

Perhaps the feature of the year was the shifting of concern over supplies of the basic commodities away from the metals to other raw materials—to the forest products group, for example. The high demands, coupled with the difficulty of maintaining output from domestic sources, required the extension of controls over these products as it had earlier in the case of metals and other products required in huge amounts to operate a war economy.

The magnitude of wartime requirements can be seen in chart 13 which presents the domestic consumption over the war period of twelve important industrial raw materials. The high rate of consumption by industry in achieving its 1944 output is clearly apparent. In the case of 4 of the 7 metals shown, new consumption highs were recorded.

The divergent consumption pattern revealed in the chart corresponded to the mixed trends in new supplies of these materials which in general equalled the high output of 1943. In contrast to the overall consumption gains in the metals group, steel was the only material to show an absolute increase in new supply as moderate to sharp declines occurred in the other six metals.

## Chart 13.—Domestic Consumption of Selected Raw Materials 1



Steel consumption is represented by net shipments of steel industry products (total shipments less shipments to members of industry for further conversion). Data for copper, lead, zinc, aluminum, and magnesium include primary and secondary. Molybdenum represents contained molybdenum on a ferro-alloy basis; comparable data for 1939 are not available. Data for crude petroleum are runs to stills. Rubber includes crude, synthetic, and reclaimed.

Sources: War Production Board, U. S. Departments of the Interior and Commerce and American Iron and Steel Institute.

In the nonmetals category sizable gains in new supply were achieved in coal, petroleum, rubber and, to a lesser extent, woodpulp. It would appear that further expansion in new supply and consumption of raw materials is likely to be limited to such commodities as crude petroleum and rubber, and possibly aluminum.

#### War Takes Most of Metals.

It is estimated that munitions production accounted for approximately 80 percent of domestic consumption of metals in 1944. Of special significance is the apparent increase in the efficiency of the utilization of materials in the munitions industry in 1944. This is indicated by the fact that the consumption of metals in munitions production increased but slightly in the aggregate, whereas munitions output was substantially larger. A 15-percent decline in inventories of the metal fabricating industries during the course of the year is evidence of the increasing effectiveness of use.

Steel consumption, as measured by shipments of steel products, did not increase much above 1943. The larger output of planes explains the sharp rise in aluminum and magnesium consumption. The capacity to produce these metals was considerably in excess of the actual use during 1944 with the result, as previously stated, that plant output was restricted by WPB orders.

While adequate supplies were available in 1944 to meet the programs, the domestic production of copper, lead and zinc declined during the year. Nevertheless, with the exception of lead, stocks of nonferrous metals were higher at the end than at the beginning of the year.

Lead consumption has been in excess of new supply since the first quarter of 1944 with the result that stocks declined sharply, particularly in the final quarter, and are now lower than at any time since 1942. The shift of lead from a relatively easy supply position in the first part of the year to one of tightness resulted at the year end in new restrictions imposed on most civilian uses of this metal.

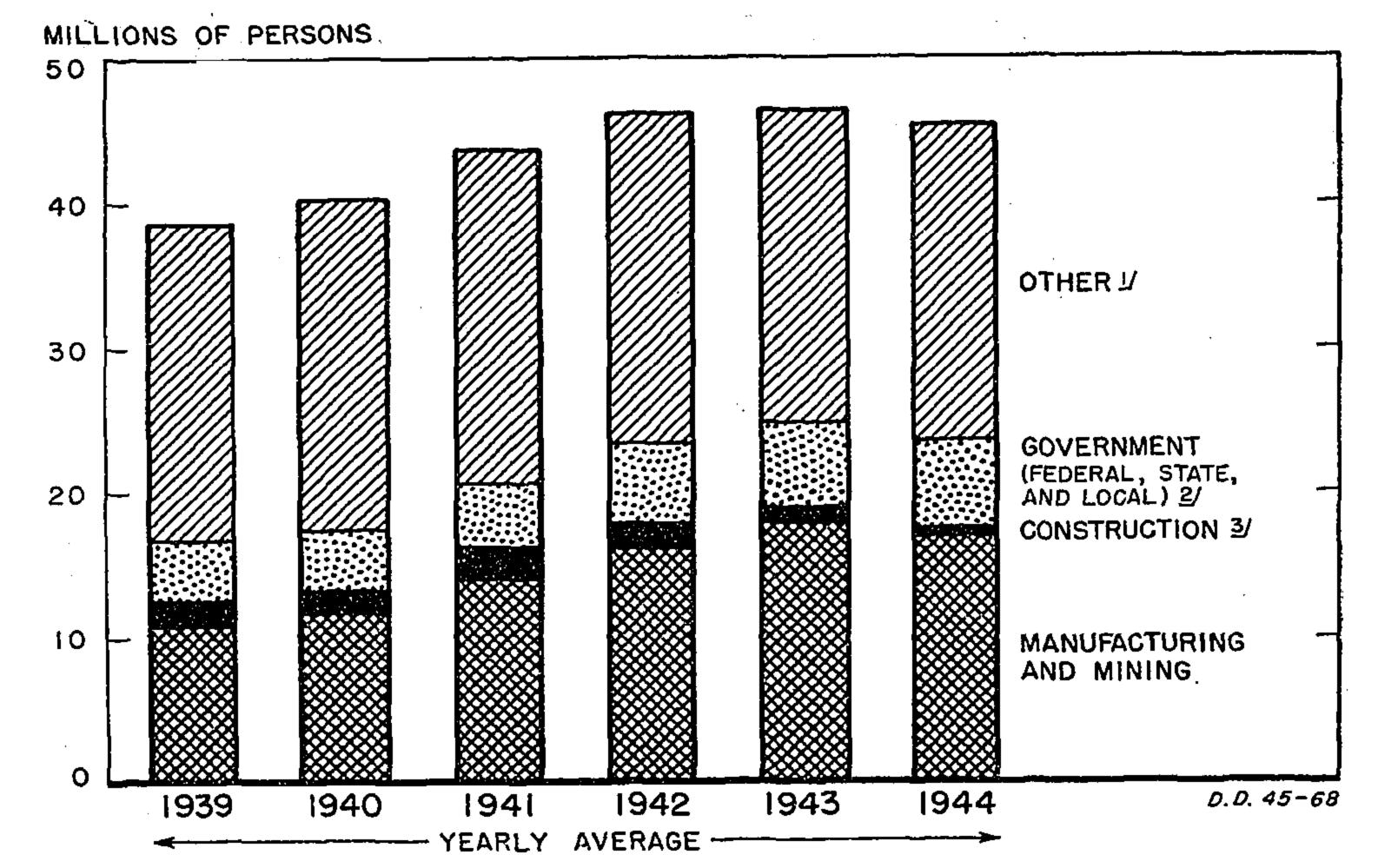
#### Other Materials.

Conservation measures stabilized consumption of bituminous coal in 1944 with the result that the increased output resulted in some rebuilding of stockpiles. The large increase in the consumption of crude petroleum in 1944 was due to the growing military requirements. The quantity of gasoline and fuel oil for civilian uses continued under strict control.

The sizable gain in consumption of rubber reflected increased supplies of synthetic rubber produced in the newly constructed Government-owned plants.

In the forest products group, the downward trend in consumption continued in 1944 although the drop in lumber was much more pronounced than in woodpulp. Reduced supplies contributed to the declining trend as indicated by the fact that 1944 was the third successive year of deficit supplies for lumber and the second year for woodpulp. The deficiencies were supplied by

## Chart 14.—Distribution of Nonagricultural Employment



- <sup>1</sup> Includes professionals, self-employed, and domestic workers, and employees in transportation, public utilities, trade, finance, service, and miscellaneous.
- <sup>2</sup> Excludes Federal force account construction.
  <sup>3</sup> Represents contract and Federal force account construction.

Sources: U.S. Departments of Labor and Commerce.

withdrawals from inventories which are now at all-time lows. Controls over distribution and end use of these products were strengthened during the year resulting in a further curtailment of nonessential uses.

## Utilization of Labor

The significant development in 1944 with respect to the labor force was the more effective utilization of the available supply. After meeting the requirements of military personnel, the remaining civilian labor force produced more goods and services than in 1943.

There were on the average 64 million persons in the total labor force, or 61 percent of the population of 14 years and older. This represents a new high in manpower utilization and compares with a pre-war labor force of 54.5 million in 1940, or close to 54 percent of the same population range.

However, as in 1943 the 1944 growth of the labor force was less than the expansion of the armed services, resulting in a net decline in the civilian labor force. Average employment did not decline as much as the civilian labor force since unemployment reached an unprecedented low of under 1 million, or less than 2 percent of the 52.6 million in the civilian labor force. On the whole, the increased output in 1944 was produced with an average of 2 percent fewer employees.

## More Effective Organization.

This was made possible primarily by the reduced labor requirements in manufacturing, resulting from more effective organization of the working forces. Employment in manufacturing declined by over one million during the year (chart

14). From 17 million in December 1943 it had dropped to 15.6 million in December 1944.

Most of the shrinkage occurred in the munitions industries. Since there was also a slight decline in hours of work, and since there was no such decline in munitions output, it is clear that there was more effective use of labor in these industries.

Agricultural employment declined further. Here again, as pointed out in the section on agricultural output, the decrease in employment was accompanied by an increase in physical output.

The other changes were minor. Construction employment, which had declined sharply toward the end of 1943, remained at about one-third of the 1942 average. This reflects the completion of most of the necessary expansion of war plants and military facilities.

Employment in transportation and public utilities increased slightly during the year. Workers in Government and in retail and wholesale trade were virtually unchanged. The largest increases occurred in miscellaneous service industries, although employment in these industries was still below the 1942 peak.

#### Military Goals Met.

As contrasted with the decline in civilian employment, expansion of the military forces continued, though at a reduced pace. The Nation's armed forces at the year end reached a strength of 11.9 million men. The increase during the year was 1.5 million, markedly less than the 3.4 and 4.9 million additions in 1943 and 1942 respectively. The approach to peak strength was indicated by the fact that the increase in the last 6 months of 1944 was less than 25 percent of the growth during the first half of the year.

The general situation in 1944 was a continuation of the tightness in the supply of labor in terms of the demand. But there were no important difficulties in increasing the armed forces as required by the services. Nor was there any restriction of munitions output due to a general labor shortage.

Shortages existed in particular labor market areas and for labor with special skills and qualifications. In the main, these shortages were handled on a local basis by means of discouraging hoarding of labor and by intensive recruitment.

The increase in the total labor force of 1.5 million in 1944 as compared with the preceding year is more than can be accounted for by the growth in population of working ages. The extra workers were drawn from school, from retirement, from unemployed housewives and from the fringes of the labor market. Of the 1.5 million increase, one million were men. With the exception of the drafting of men into the armed forces, this utilization of the Nation's manpower was achieved by voluntary inducements rather than compulsion. There was no such total mobilization of manpower as has been in effect in other warring countries.

Nevertheless, chart 15 shows that over the 4 years from 1940 to 1944 the total labor force grew by almost 10 million, or 18 percent. Of that total less than 3 million would have been added if there had been no war and if economic conditions had remained as they were in 1940.

#### Source of Added Labor.

Chart 16 indicates the sources from which the other 7 million have been

drawn. Almost 2 million are young men aged 14 to 24, most of whom have left school for military service or war work, or are managing to combine a job with continued education. One million are girls aged 14-19. More than three-quarters of a million are men aged 55 and over, most of whom have postponed retirement because of wartime demands.

Over half a million men aged 25 to 54 have been drawn from the fringes of the labor market. Two and one-half million are women aged 20 and over. These are mostly married women without young children. They did not seek employment in 1940 but have been drawn into the labor market by wartime demands.

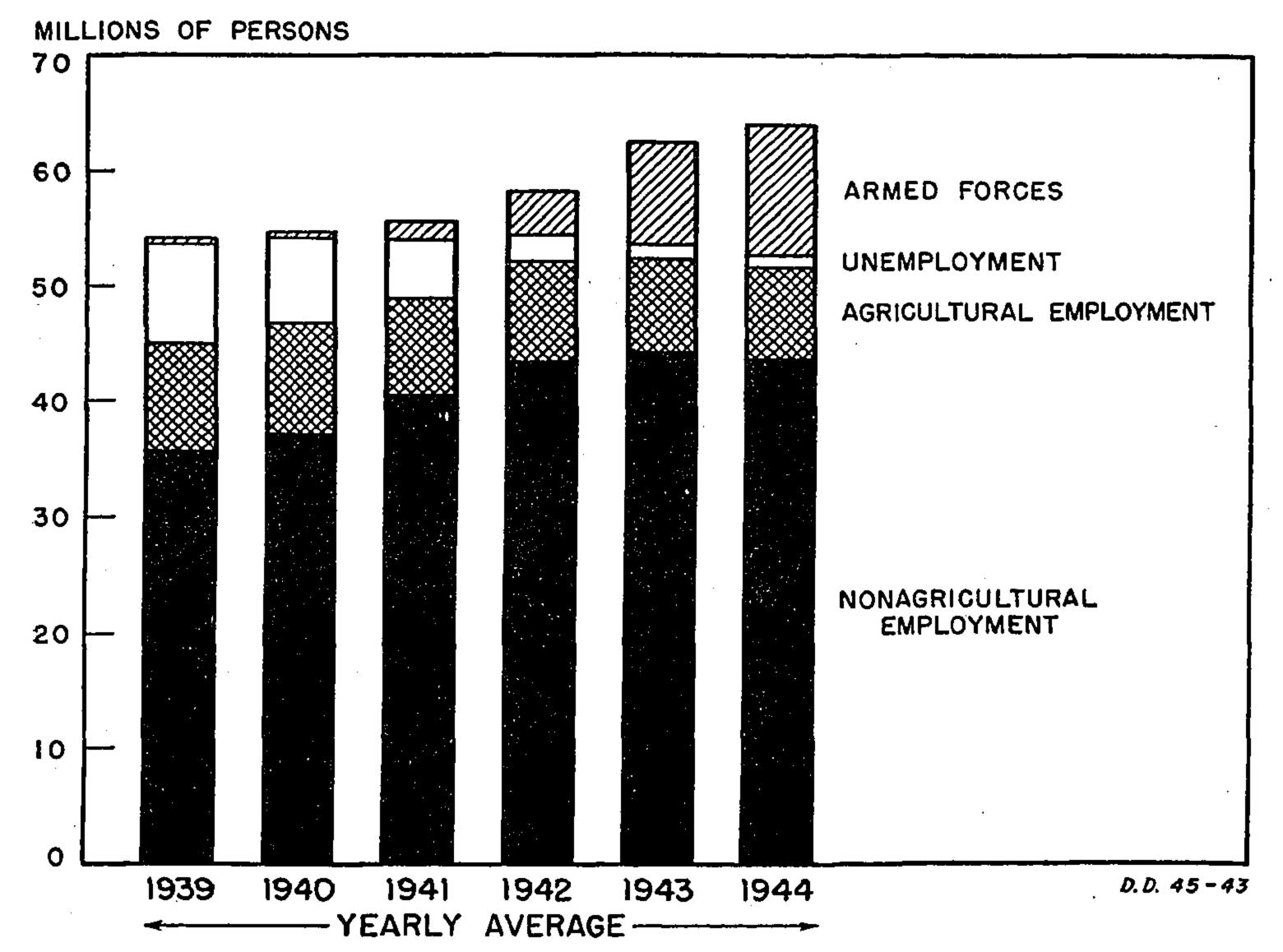
These facts must be kept in mind in viewing the post-war problem of the economy. Undoubtedly a large number of the 7 million war-induced men and women in the labor market will withdraw after the end of the war. The number that can be expected to remain is still conjectural.

However, even if all of them withdraw, the number in the market looking for jobs will be considerably higher than the average employed in civilian occupations last year at the peak of our productive effort. To these will be added each year the normal growth of the labor force of around half a million persons each year.

#### The Productive Plant

The production achievements in 1944 are based upon the rapid expansion of facilities which in the main had been completed in 1943. The new construction and facility additions in 1944 represent, in most instances, the finishing

## Chart 15.—The Labor Force 1



<sup>1</sup> Data include persons 14 years of age and over, excluding institutional population. Sources: U. S. Department of Commerce, and U. S. War and Navy Departments.

off touches on earlier expansion and, to a lesser extent, projects for the manufacture of new weapons and stepped-up schedules of others that became necessary in 1944.

#### New Construction Declines.

Since the inauguration of the defense program in July 1940, over 23 billion dollars have been spent for new manufacturing facilities. Only 3 billions of this total were spent in 1944. More than 90 percent of the expenditures in 1942 and 1943 were for munitions industries, whereas only 75 percent of the much smaller expenditures of 1944 were devoted to such purposes.

The drop in expenditures for facilities devoted directly to the war program was thus very large. On the other hand, investment in new plant and machinery for civilian type industries was maintained at the volume of the preceding war years, though this volume was com-

paratively low.

The bulk of 1944 construction expenditures were devoted to munitions projects begun earlier. Thus, the basic aircraft and shipbuilding facilities programs were completed and the synthetic rubber and 100 octane gasoline facilities were brought into operation. Construction of iron and steel and nonferrous metal projects which were still incomplete at the beginning of the year were either finished or terminated. However, new and expanded facilities for heavy bombers, jet-propelled planes, heavy artillery and shells, mortars and improved types of combat vehicles and landing craft, were required to meet military needs but were a relatively small part of 1944 expenditures.

The extent of the decline in new construction and plant expansion in 1944 is indicated by the drop in total expenditures from 5.8 billion dollars in 1943 to 3.0 billion in 1944 (chart 17). It is evident also in the decrease in machine tool shipments. From nearly 1.2 billion dollars in 1943, shipments fell to less than half a billion in 1944.

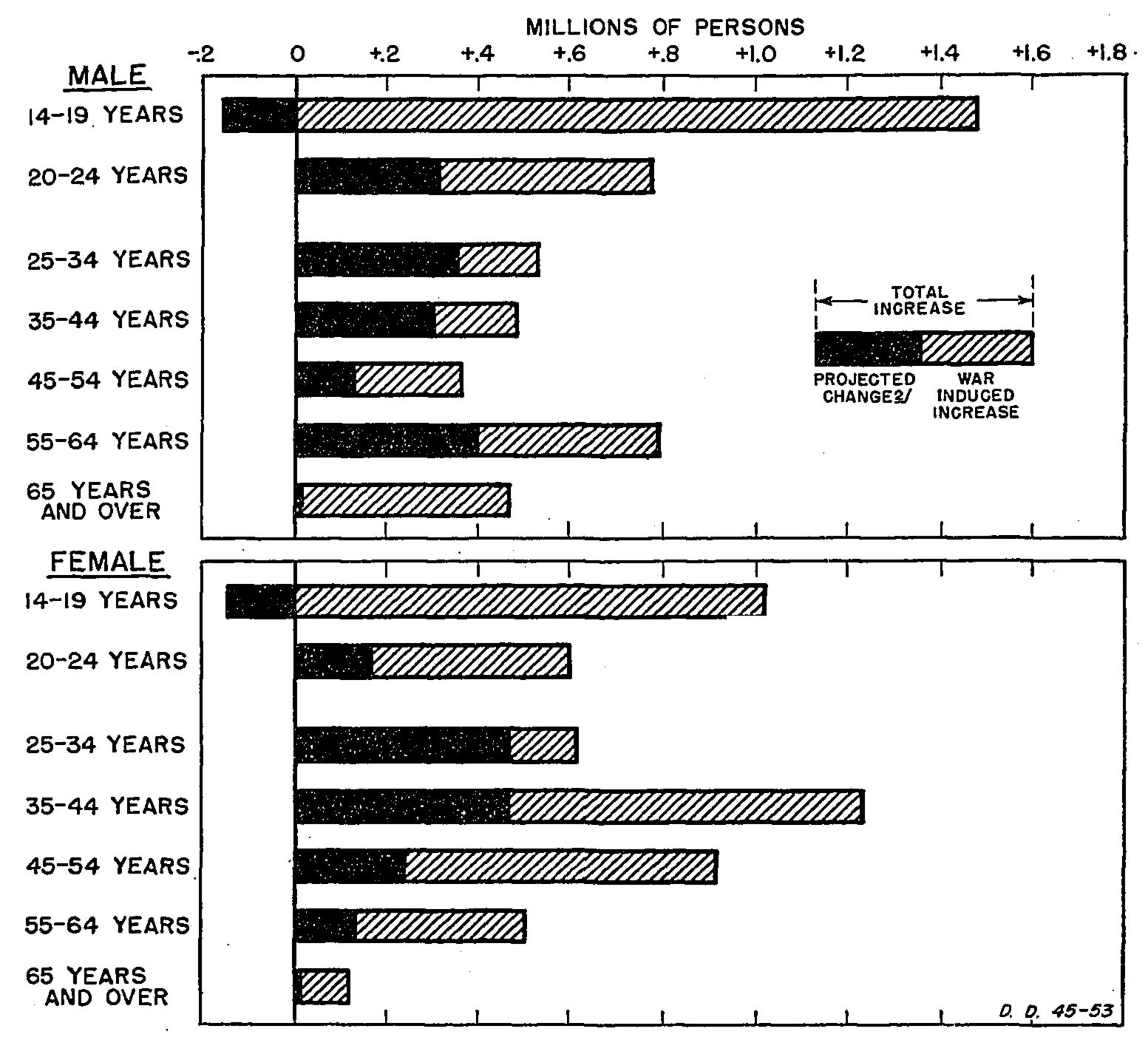
As a consequence of the reduction in war construction, publicly financed expenditures declined sharply in 1944 and were less than 40 percent of the 1943 amount. On the other hand, in 1944 some new equipment was made available to nonmunitions industries for the first time since 1941 and private expenditures for new facilities increased.

New investment in these industries was 150 percent higher than in 1943. The aggregate was still below that for munitions industries, however, and comprised only 25 percent of the total.

The volume of new investment for the nonmunitions group was largest in the food and kindred products category where the amount spent was comparable to pre-war totals. In the paper and paper products group, expenditures increased substantially (very little had been spent since 1941), but these were not up to pre-war figures. Textile, shoe and apparel making machinery purchases all were higher than in 1943.

By and large, the 1944 output represents a high level of utilization of the Nation's productive plant. In the case of

## Chart 16.—Growth of the Labor Force, Annual Averages, 1940 to 1941 <sup>1</sup>



<sup>1</sup> Data include total civilian labor force 14 years of age and over (excluding institutional population) and the armed forces. <sup>2</sup> Based upon population growth and trends in evidence prior to 1940.

Sources: U. S. Department of Commerce, and U. S. War and Navy Departments.

new Government-owned munitions facilities, a small proportion was idle during parts of the year as a result of changes in military requirements. This was particularly true for light metal and explosive and ammunition loading plants. In the nonmunitions industries utilization of plant has been at high levels, the reduction in the use of materials and manpower limiting or precluding expansion rather than forcing the curtailment of the use of facilities.

The intensity of war production activity has placed a severe burden upon much of the Nation's productive equipment. Maintenance of plant and machinery has faced the problems associated with inadequate highly skilled manpower, and the pressure to maintain full production. Shutdowns for repairs not immediately necessary have been avoided with consequent deferment of maintenance. On the other hand the expenditures for maintenance were high and the large purchasers of repair parts and materials prevented as large capital consumption in 1944 as might be expected at the peak of the war effort.

## Domestic Transportation

The third year of war meant a continued strain upon the transport facilities of the Nation. The remarkable

feature of the year's performance, however, was not that there were difficulties, but that an increased quantity of war matériel was produced and shipped abroad. At the same time, a high volume of civilian traffic was handled as evidenced by the continued heavy load of passenger traffic carried by the railroads.

This larger volume of traffic moved by all domestic transport reflected the attempts in the first 2 years of the war to break the bottlenecks—as in the case of the new pipelines to bring petroleum products to the East Coast—as well as the cooperative efforts of the Government and the transport operators to utilize most effectively the available facilities.

Sustained high traffic has done much to improve the financial position of the common carriers. The railroads, for example, have continued to retire their fixed obligations at a substantial rate and, like all business, will enter the postwar period in a much stronger financial position than existed in 1939.

The war-induced distribution of traffic has produced a marked deviation from the normal traffic flow, and peactime conditions will result in a shifting of traffic back to the coastal water lanes and motor carriers. However, here, as elsewhere, the war has demonstrated

that what the railroads and other common carriers require for successful operation is volume.

Given the volume of traffic which would be associated with sustained highlevel production and consumption in the post-war period, the carriers would be in a position to improve their facilities to increase efficiency, and to induce added expansion of use through better service and low-cost transportation.

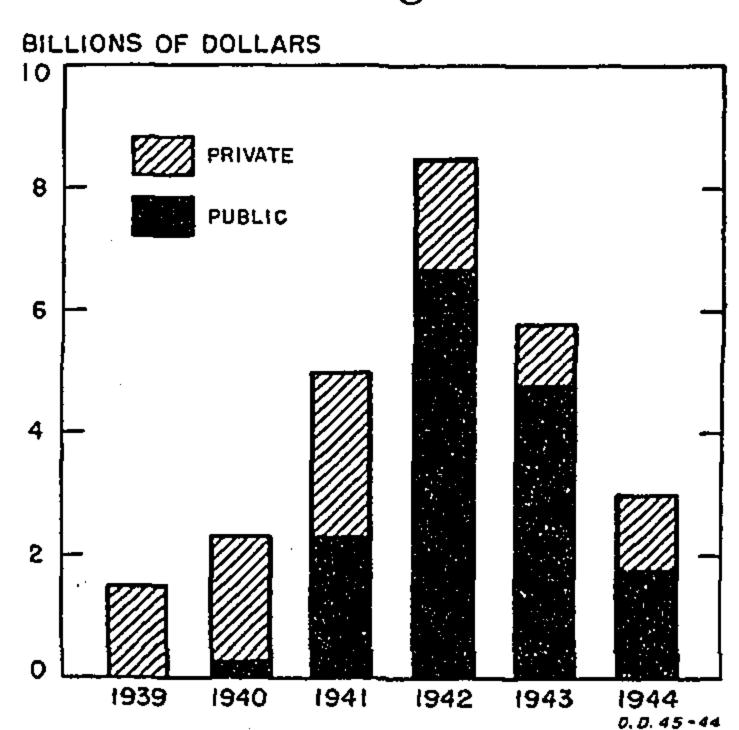
The pattern of stability at levels determined by the rapid expansion in 1942 and 1943, characteristic throughout the economy in 1944, is to be found in transportation also. The index of the total volume of domestic transportation in 1944 was 223 percent of the 1935-39 annual average, a gain of 4 percent over 1943. The uptrend extended only into the early part of the year, and toward the latter part there was a slight downward tendency.

Commodity and passenger traffic were up 3 and 6 percent, respectively, above 1943 volume (chart 18). All forms of traffic, with the single exception of motor trucks, contributed to the gains. However, as the year drew to a close, only the domestic airlines continued to show any significant growth.

An examination of chart 19 clearly shows the dynamic changes in the composition of ton-mile traffic between 1941 and 1943, and the stabilization of traffic during 1944. The most striking development is the extreme divergence which occurred in the first 2 years of the war between rail and waterborne (domestic) ton-miles. However, the diversion of traffic from water to rail came to a halt by the latter part of 1943 as the submarine menace was brought under control, and our coastwise lanes could carry increasing amounts of vital petroleum to the Eastern refineries and coal to New York and New England.

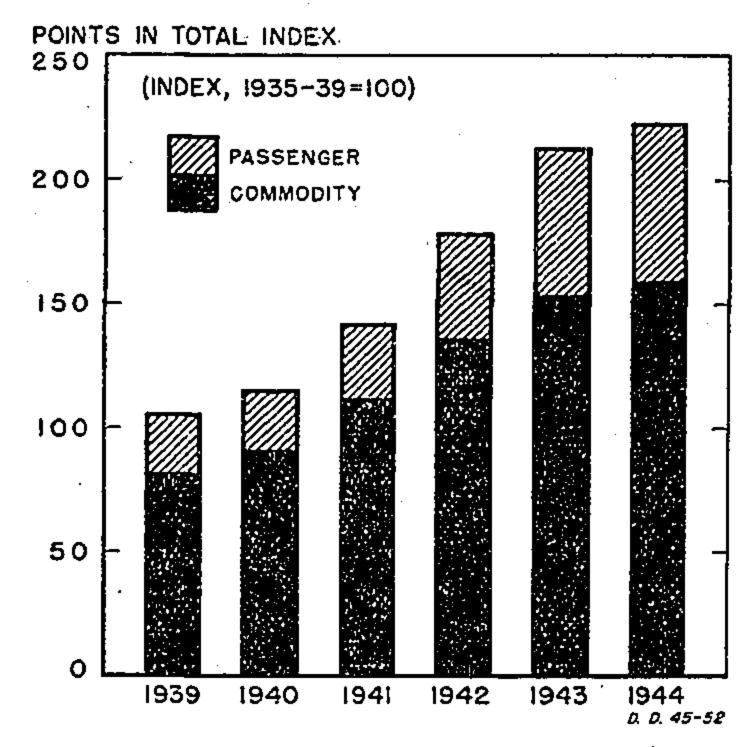
Ton-miles of freight on the inland waterways over the war period have been stable. Great Lakes traffic was essentially the same in volume in 1943 and 1944 as in 1941, although extremely favorable weather conditions resulted in a peak year in 1942. There was little

## Chart 17.—Expenditures for New Manufacturing Facilities



Sources: War Production Board and U. S. Department of Commerce.

## Chart 18.—Volume of Transportation



Source: U. S. Department of Commerce.

change in commodity movements on the rivers, canals, and connecting channels from 1941 through 1943, but 1944 witnessed increased activity due to extremely heavy barge movements on the Gulf Intracoastal waterway and the Mississippi River system.

#### Railroad Traffic.

Again in 1944 the railroad system, which has borne the brunt of the expanded wartime traffic, was able to handle the heavy loads. Faced with the increased shipping of vital goods destined for two widely separated wars, the railroads increased their operating efficiency—particularly by lowering the turnaround time for cars and significantly increasing the gross ton-miles per trainhour.

Carloadings were up slightly more than 2 percent mainly as a result of small increases in coal and in l. c. l. freight. The number of cars of grain, ore, forest products and livestock loaded were virtually unchanged from 1943.

The growing resources devoted to the prosecution of the war in the Pacific caused the rail ton-miles in the Western district to rise at a rate more than double that for the country as a whole. There is little doubt that this trend will continue and that West Coast traffic will not reach its peak until sometime after the defeat of Germany.

#### Truck Traffic.

The difficulty in securing replacement equipment, the gasoline shortage among nonmilitary consumers, and above all, the complete dependence of the industry on rubber, all contributed to the absence of increase in the volume of ton-mile traffic handled by intercity trucks. The critical rubber and gasoline situation necessitated the elimination of duplicating routes, cross hauls, and a severe limitation on the length of haul. These factors resulted in a decline in the average haul and in ton-miles.

The industry's performance was noteworthy under prevailing circumstances, and was accomplished through the more efficient and intensified utilization of equipment.

It is also significant that despite its difficulties the trucking industry played a vital role in the war effort—especially in the servicing of new war plants and their workers located in areas not adequately served by other types of transport.

#### Pipe Lines.

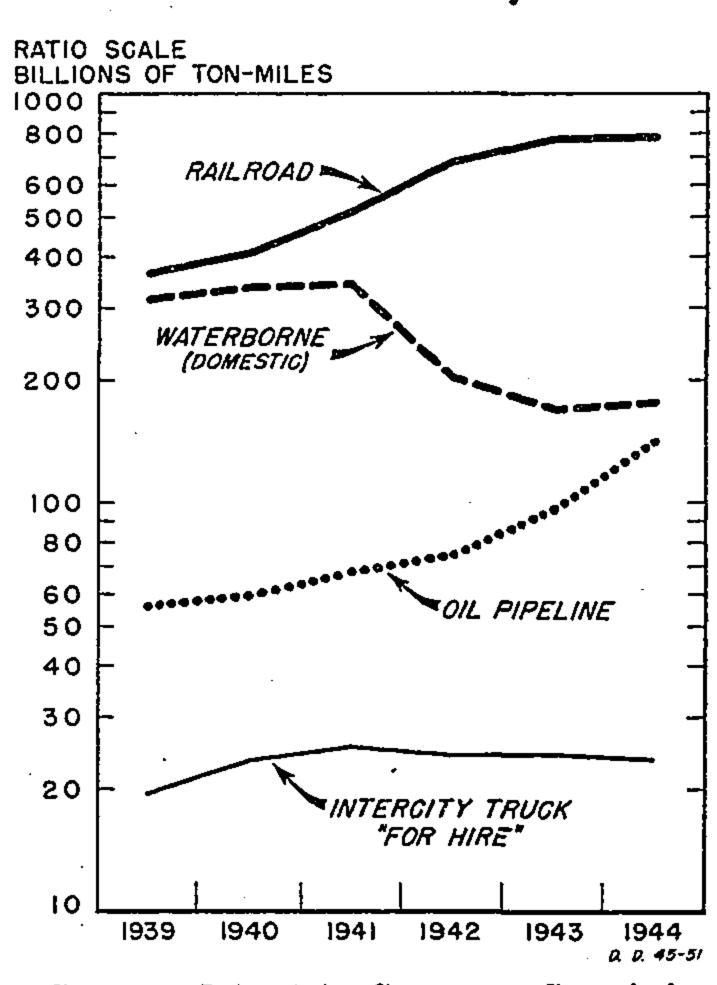
The sharp increases in the ton-mile performance of oil pipelines were due primarily to the immense emergency pipeline expansion program, and to capacity operations of existing lines. The "Big Inch" crude oil line and the "Little Big Inch" refined oil line were both at capacity operation by the latter part of 1944 and accounted for almost 30 percent of total ton-miles by pipeline. The attainment of capacity use of the emer-

gency lines, however, precludes much of a gain beyond the year-end flow.

Thus, both the expanding pipeline facilities and eased tanker situation combined to lighten the railroad's contribution to the delivery of petroleum to the critical East Coast area. Although deliveries in the latter part of 1944 were about 10 percent higher than in the corresponding period in 1943, the tank car participation had declined approximately one-third while both pipelines and tankers were up by two-thirds and one-third respectively.

It must be pointed out, however, that success in adjustments required in transporting petroleum to the East Coast area

Chart 19.—Commodity Traffic



Sources: Interstate Commerce Commission, U. S. Department of Commerce, and U. S. War Department.

do not signify any imminent increase in civilian supply. The greater deliveries have been fully matched by mounting military demand. Nevertheless, essential transport facilities have been kept in operation, including that represented

by private cars.

Gasoline was made available to intracity commercial vehicles in sufficient quantities to permit the continued operation of commercial services. Although such services were curtailed, this imposed no great difficulties on the consumers and improved the efficiency of the delivery service of business establishments. Sufficient gasoline was made available to owners of private noncommercial motor cars to permit an average mileage of 5,400 miles per car in 1944.

#### Air Traffic Up.

Record movements of express and airmail in 1944 sent the air commodity index soaring to almost eight times the 1935-39 average. This traffic is not plotted on chart 20, as the total ton-miles hauled is not large in comparison with the other carriers. From 1939 to 1944 it was up from 11 to 65 million ton-miles.

Table 6.—Expenditures for Manufacturing Plan: and Equipment: Pre-War and War

[Millions of dollars]

•	<b>D</b>	War									
Industry	Pre-war, Jan. 1937– June 1940	July 1940	-Dec. 1943 rate)	(annual	1944 1						
	10.10	Private	Public	Total	Private	Public	Total				
Total expenditures	1,640	1, 960	3, 940	5, 900	1, 240	1, 820	3, 060				
Munitions industries, total <sup>2</sup> Aircraft Shipbuilding Combat vehicles Explosives and ammunition loading. Guns, ammunition, shell and bombs Steel and iron Nonferrous metals Machinery and electrical Chemicals, petroleum and coal products. Synthetic rubber Aviation gasoline Miscellaneous industries Nonmunitions industries	780 30 10 (3) (3) (3) 220 30 130 310 (3) (3) 50 860	1,460 100 50 70 (3) 80 270 140 170 280 10 150 140 500	3,940 790 540 140 710 520 340 310 150 180 170 30 60	5, 400 890 590 210 710 600 450 320 460 180 180 200 500	480 40 20 20 (3) 20 80 80 80 90 (3) 100 (3) 760	1,820 440 250 60 40 340 170 100 60 120 90 90 60 (3)	2,300 480 270 80 40 360 250 130 140 210 90 190 60 760				

<sup>&</sup>lt;sup>1</sup> Preliminary.

3 Less than \$5,000,000.

Source: War Production Board and U.S. Department of Commerce.

<sup>&</sup>lt;sup>2</sup> Details do not necessarily add to totals because of rounding.

As in the past few years, the limiting factor on supply was the number of available airplanes. By the close of the year, the Army had returned almost all of the planes taken over in May 1942, so that the domestic airline industry was operating 344 planes—compared to 188 at the beginning of the year. These additional planes, plus the high degree of utilization of all equipment and facilities enabled the airlines to carry 65 million ton-miles of freight and mail—27 percent more than in 1943.

#### Passenger Traffic Heavy.

Passenger-miles in 1944 were at an all-time high. The increase was spread over all transport agencies, with the airlines showing the largest relative increase.

The dispatching of a record number of American troops to ports of embarkation, added to a tremendous movement of furloughed personnel, and increasing numbers of returning casualties, resulted in military use of approximately 40 percent of railroad passenger-miles.

Despite some inconvenience of wartime travel, and frequent appeals by the Government and industry to individuals to refrain from nonessential travel, civilian demand continued at record volume in 1944. It was always possible for anyone to travel to any desired destination, and much of the travel was about at the same speed and comfort of earlier years when passenger traffic was considerably less.

In the main, what the heavy wartime traffic has meant is that equipment was generally run with a high load factor. Standees were not uncommon, but the inadequacy of accommodations apparently acted as only a minor deterrent to travel.

Local transit lines carried 4 percent more passengers than in 1943, with all regions excepting the Northeastern area sharing in the increase. Continuing the long-term trend, there were further gains in the traffic in the smaller towns and cities and in the displacement of electric railways by motor bus utilization.

## Retail Trade

The increase in consumer expenditures in 1944 noted previously meant, of course, record retail sales. Despite shortages of some types of goods, retail sales in 1944 exceeded 69 billion dollars, an increase of about 9 percent from 1943. The year was a profitable one for retailers—in some instances a highly profitable one.

Evaluation of the volume of goods moving through retail channels is difficult under the conditions which prevailed in 1944 since quality shifts, substitutions, and upgrading of merchandise were widely prevalent. How to measure volume, or quantities, under such cir-

Table 7.—Volume of Transportation

[1935-39=100]

Item	1939	1941	1943	1944
Combined index  Excluding local transit  Commodity index  Passenger index  Excluding local transit  Local transit lines	106	142	214	223
	105	146	220	230
	107	147	201	208
	102	125	256	272
	105	143	357	388
	100	110	172	179

Source: U.S. Department of Commerce.

cumstances presents extreme difficulties. Price controls were effective in preventing increases over most areas of the economy, but the application of the technique of adjustment of dollar sales by means of price indexes yields less satisfactory results in war than in peace.

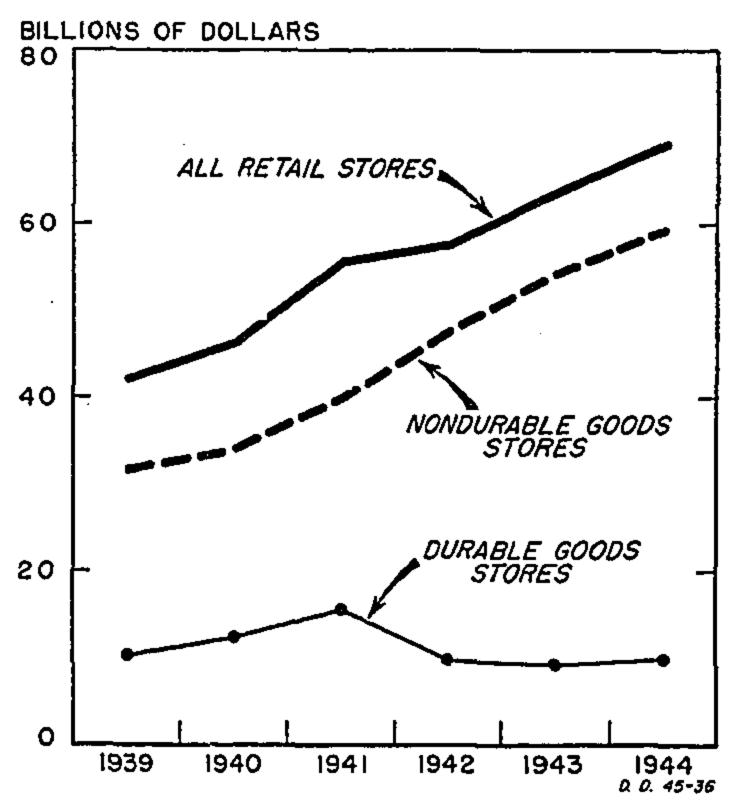
As previously indicated in the discussion on consumer expenditures, the only clear evidence of higher volume was in foodstuffs. Elsewhere there is little evidence of general increases among the major groups, although individual items were in some cases in more plentiful supply. Others, of course, were available only in reduced quantities.

Chart 20 indicates quite clearly that dollar sales of nondurable goods stores continued to increase substantially in 1944, although at a reduced rate from that of the previous war years. Sales of durable goods stores, which reached a peak of 15.6 billion dollars in 1941 and dropped to a wartime low of 9.3 billion dollars, increased in 1944.

This occurred not because larger quantities of durable goods were available; on the contrary, stocks of some new goods such as automobiles and radios were at the vanishing point. Rather, the rise in dollar sales of durable goods stores was made possible by the substitution of higher priced lines, by the addition of nondurable goods lines not usually handled by these stores, and by increases in prices, particularly of furniture.

Dollar sales of all major groups of retail stores increased in 1944. Chart 21 indicates that eating and drinking places

Chart 20.—Sales of Retail Stores



Source: U. S. Department of Commerce.

recorded the largest gain—16 percent. This rise may be attributed to enlarged consumer purchasing power as well as to changing consumer habits under wartime conditions.

Gains among the other nondurable groups were more moderate, ranging from 6 percent for filling stations to 11 percent for drug stores. The increase in filling stations sales was a reversal of the downward movement of the previous 2 years. Although the supply situation was still relatively tight, the quantity of gasoline sold was larger than in 1943.

Apparel stores sales increased 7 percent from 1943, but the quantity sold was approximately the same since prices rose by as much. Dollar sales were maintained despite some curtailment of manufacturers' shipments of clothing for civilian use. There was also evidence during the year of further disappearance of low-priced lines in clothing and of higher prices due to stores adding merchandise not previously handled. These factors likewise contributed to the increase in sales of general merchandise stores.

In the case of foods, the average retail price in 1944 was slightly lower than in 1943 because of price rollbacks undertaken in the latter part of 1943. The quantity sold, however, was well over 1943 and sales of food stores in 1944 increased by 8 percent over 1943.

The increase in the "other" group of retail stores is largely accounted for by a sharp rise in liquor store sales due to the freeing of larger quantities of liquor stocks and to increased excise taxes on alcoholic beverages effective in April.

Particularly noticeable among the durable goods groups was the 11 percent increase in sales of the home furnishings group, the highest for any line except eating and drinking places. A large part of the rise was due to the sharp increase in prices of furniture and home furnishings—the average price of 1944 for the group showing a gain of 8 percent over 1943.

Following heavy pre-tax buying in the first quarter of the year, jewelry store sales declined from 1943 for several months. Although jewelry stores usually experience heavy Christmas trade, sales in the last months of the year were on the average only 2 percent above 1943 compared to more than 25 percent in the first quarter. The high excise tax as well as scarcity of quality merchandise dampened consumer demand in this field. Sales for the year were 4 percent above 1943.

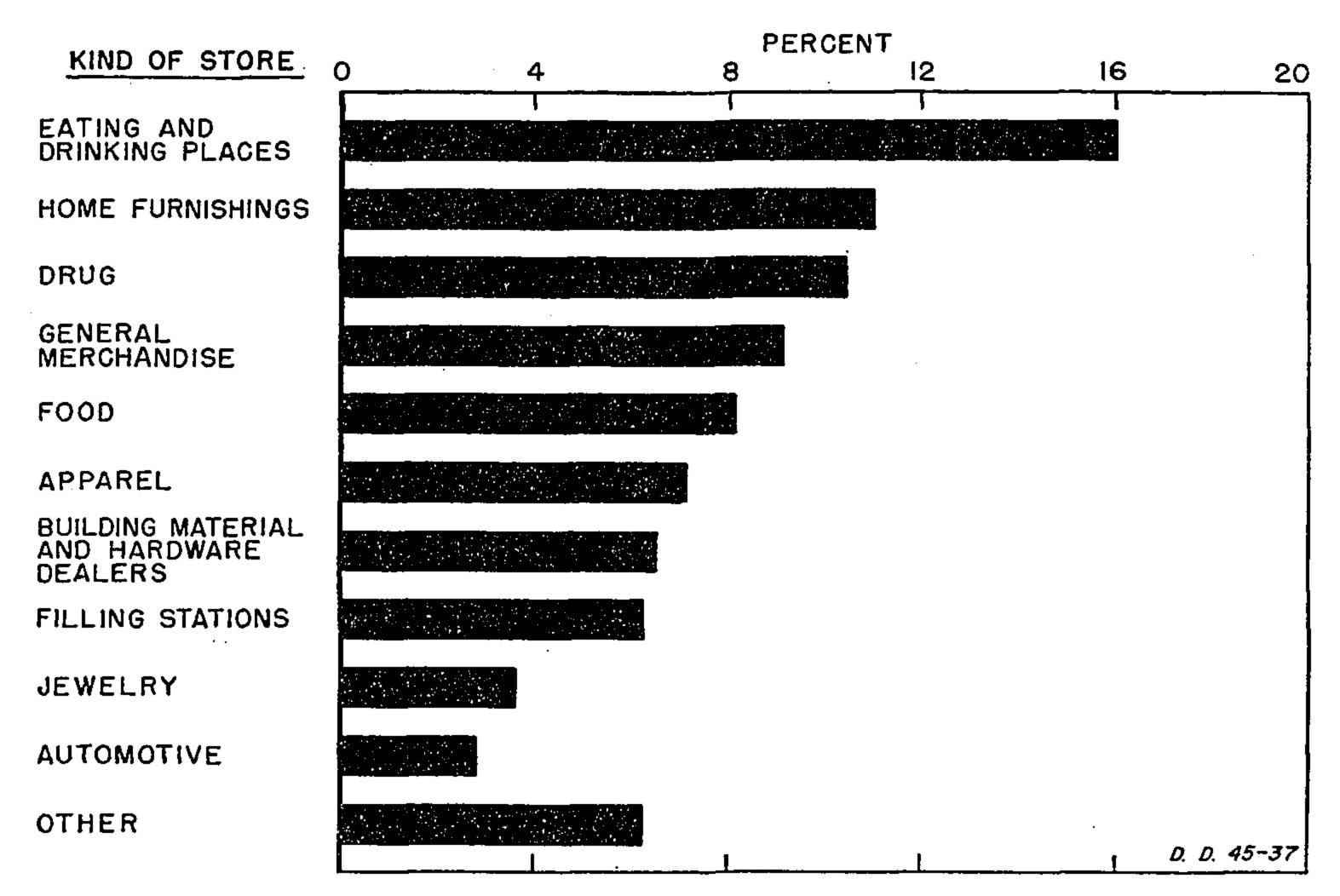
Sales of automotive stores were up slightly on a dollar basis. An increase in automobile parts and tire sales, and in the number of trucks released under rationing more than offset the decline in new passenger car sales. Automotive stores are also handling some nondurable goods and doing more servicing of cars. These factors were effective in maintaining sales. However, after allowing for price changes, the physical volume of sales was slightly below 1943.

#### Chain Stores Gain in 1944.

About 22 percent of the Nation's total retail trade in 1944 accrued from sales

<sup>&</sup>lt;sup>1</sup>This figure is a revision of the recent Department of Commerce estimate of 67 billion dollars, which was based on data for the first 8 months. Holiday sales, heavier than anticipated, accounted in part for the upward revision. In addition, more recent information on State sales tax collections indicated that the estimates of sales for the earlier months of the year were somewhat low.

Chart 21.—Percentage Increase in Sales of Retail Stores, 1944 from 1943



Source: U. S. Department of Commerce.

of chain stores and mail-order houses which reached 15.5 billion dollars for the year. This was 7 percent above the 1943 total. Although the rise in chain store sales was more moderate than the relative increase in sales of independent retailers, it nevertheless represents marked expansion in all major lines of trade. The margin of gain over the preceding year's total was more than twice as large in 1944 as in 1943.

In pre-war years chains averaged about 22 percent of all retail sales so that the 1944 proportion was average. This proportion had risen to 24 percent in 1942, but dropped back during the following year.

The 1943 shift in the total sales volume between chains and independents in retrospect is thus seen to reflect mainly a readjustment to their pre-war positions in the retail field. The trends during the war years varied somewhat among the different business groups, as can be seen

from chart 22, which includes the lines accounting for three-fourths of chain store business.

Grocery chains, which alone account for about one-third of total chain store sales, have stabilized their proportion as contrasted with the pronounced reduction through early 1943. The general merchandise and apparel groups likewise recorded increases in sales from 1943 to 1944 about in line with the increase in total sales in their groups resulting in little change in the proportion distribution. Apparel chains slightly improved their 1943 share.

During the year retailers in most lines were able to maintain their inventory position and only a very small part of the increase in retail sales in 1944 stemmed from inventory withdrawals. Inventories of all retail stores declined approximately 2 percent in value. This is a moderate decrease in view of the short-

ages of many preferred lines, notably

Table 8.—Sales of Retail Stores

Millions	of	dollars]
----------	----	----------

Kind of business	1939	1940	1941	1942	1943	1944
All retail stores  Durable goods stores  Nondurable goods stores	42, 042	46, 388	55, 490	57, 552	63, 684	69, 275
	10, 379	12, 418	15, 604	9, 846	9, 339	9, 931
	31, 663	33, 970	39, 886	47, 706	54, 345	59, 344
Durable goods stores:  Building material and hardware group  Home furnishings group  Automotive group  Jewelry stores	2, 735	3, 108	3,862	3, 799	3, 366	3, 588
	1, 733	2, 022	2,611	2, 454	2, 258	2, 507
	5, 549	6, 862	8,544	2, 840	2, 751	2, 834
	362	426	587	753	964	1, 002
Nondurable goods stores: Food group Eating and drinking places Apparel group Filling stations Drug stores General merchandise group Other retail group	10, 165	10, 906	12,576	15, 755	17, 450	18, 947
	3, 520	3, 874	4,796	6, 173	8, 034	9, 314
	3, 259	3, 441	4,157	5, 193	6, 323	6, 814
	2, 822	2, 954	3,454	3, 021	2, 453	2, 604
	1, 563	1, 637	1,821	2, 185	2, 588	2, 845
	6, 475	6, 847	7,931	9, 015	9, 981	10, 853
	3, 859	4, 311	5,151	6, 364	7, 516	7, 967

Source: U. S. Department of Commerce.

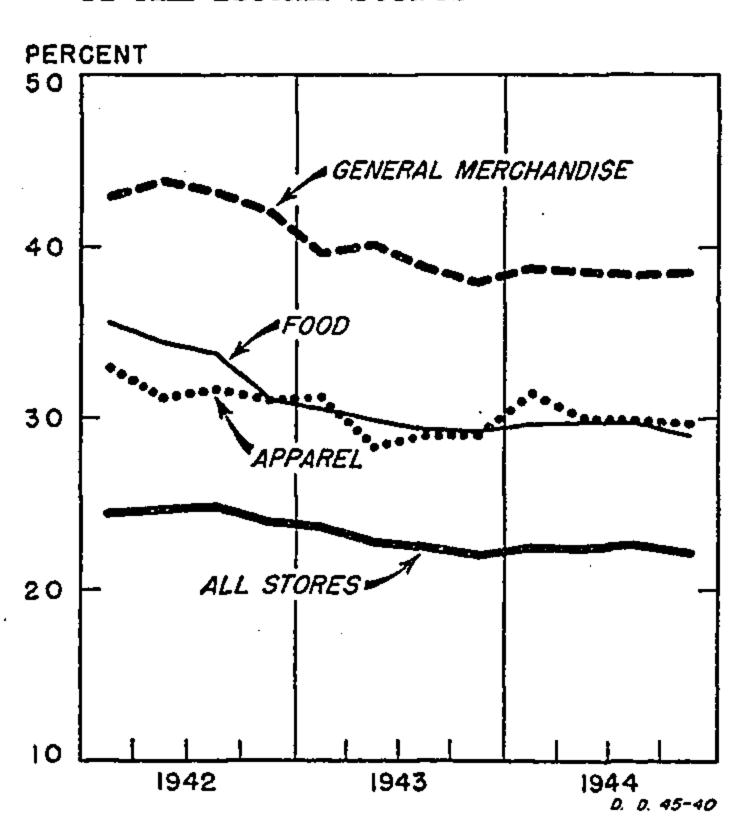
clothing and durable goods, and especially in light of the high dollar sales during the year. The continued stability of inventories may be attributed to the substitution of higher-priced lines.

The decline from 1943 in the value of nondurable retail inventories took place in the latter half of the year, and amounted to 2 percent by the year end. Inventories of apparel (excluding shoes) and drug stores were consistently above the corresponding months of 1943.

In the general merchandise group, inventories were above the corresponding months of the previous year through August, but, like the nondurables as a whole, were lower during the last months. Food inventories' followed an irregular pattern of decline after the first quarter of the year.

Liquor stores greatly increased their stocks during midyear, and, despite high consumer demand, maintained higher inventories with the aid of the production of blendable spirits during the August holiday. The anticipation of the further liquor holiday in January caused stocks to move into retail channels more freely.

Chart 22.—Sales of Retail Chain Stores as a Percentage of Sales of All Retail Stores 1



<sup>1</sup> Percentages are based upon seasonally adjusted dollar values.

Source: U. S. Department of Commerce.

With one exception durable goods stores maintained or increased the dollar value of their inventories over the end of 1943. This was made possible by the substitution of higher priced lines and nondurable items not usually handled. Motor vehicle dealers alone experienced constant depletion of stocks during the year.

#### Wholesale Trade in 1944.

In general the experience of wholesalers was similar to that of retailers—a persistent demand for goods resulted in record sales in 1944. Sales of all wholesalers reached a total of almost 104 billion dollars, while service and limited function wholesalers, the more conventional type of middlemen, registered a

sales volume of more than 41 billion dollars. These represent gains over 1943 of slightly under 5 and 4 percent, respectively. Although they were not quite so favorable as those realized by retailers, it must be remembered that retailers in many lines were able to supplement their limited supply of goods by repairs and other services.

The gains in the sales volume of service and limited function wholesalers were confined to a great extent, to those establishments dealing primarily in non-durable goods. The sales leaders were beers and liquors, drugs and sundries, food, and farm products.

The rise in excise tax rates played an important part in the 12 percent increase in liquor sales volume and an only slightly smaller part in the 11 percent increase in the marketings of drug and sundries establishments. All other types of nondurables, with the exception of petroleum products and dry goods, showed slightly increased trading.

Table 9.—Sales of Wholesalers

[Millions of dollars]

<del></del>		<u> </u>		
	1939	1941	1943	1944 1
All wholesalers	55, 266	83, 563	99, 290	103, 426
Service and limited func- tion wholesalers	23, 642	34, 353	39, 922	41, 255
Durable goods estab- lishments	7, 086	12, 289	9, 922	10, 079
Nondurable goods es- tablishments	16, 556	22, 064	30, 000	31, 176

<sup>1</sup> Preliminary.

Source: Department of Commerce.

Among suppliers of durable commodities, only hardware and automotive supply dealers showed increased sales. Diminishing construction activity was reflected in slight declines in sales of lumber, building materials and electrical goods. The sharpest decline was felt by furniture and homefurnishings wholesalers who have been relying heavily on their rapidly diminishing inventories.

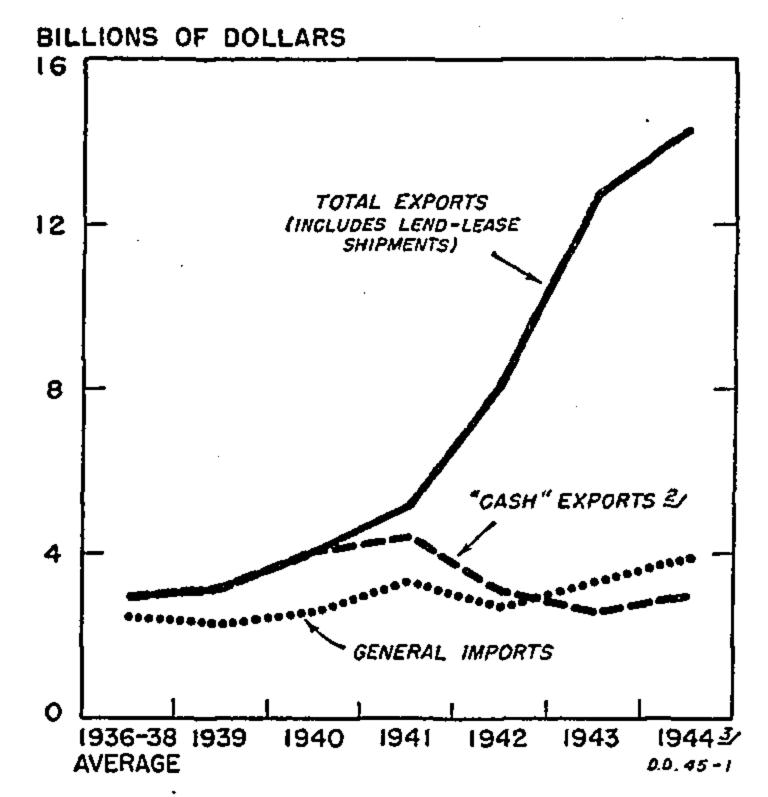
Wholesalers inventories, on the whole, experienced only minor fluctuations throughout 1944. Notable exceptions were the declines in such commodities as shoes, metals, homefurnishings, and dairy and poultry products, and the increases in automotive and electrical supplies. The leveling out of inventories, after the considerable liquidations which occurred in 1942 and 1943, gives evidence that they are at minimum levels for efficient marketing operations.

### Foreign Trade

Foreign trade did not play a determining role in the economy during 1944. While the actual sale or transfer of goods to foreign governments or nationals was of record proportions in dollar terms, it represented, in the main, a definite allocation of crude materials, and finished products from United States resources in futherance of the joint efforts to bring Germany and Japan to the end of their dreams of world domination.

To a considerable extent, therefore, what is classed as foreign trade was of

Chart 23.—Foreign Trade of the United States <sup>1</sup>



- <sup>2</sup> Excludes trade in gold and silver.
- <sup>2</sup> Represents non-lend-lease exports. <sup>3</sup> Includes estimates for December.

Source: U. S. Department of Commerce.

the same character as the transfer of equipment and supplies to our own armed forces girdling the globe. Shipments to United States military forces increased greatly in 1944, as a constantly growing proportion of our armed strength was brought into combat with enemy forces.

The amount of domestic production which actually moved abroad (including shipments to United States military forces) represented not only a record total, but also a much larger proportion of aggregate domestic output than was true of any recent year. The sharply rising trend of the total overseas movement is indicated by railroad cars unloaded for export which were shown in the December 1944 issue of the Survey (page 11).

The following discussion pertains to Lend-Lease and other foreign trade, and does not cover the transfers abroad of goods for the account of the military.

#### Export Value Up, Volume Steady.

In 1944, Lend-Lease exports rose to 11.3 billion dollars from 10.1 billion in 1943, and total exports to 14.3 billion dollars from 12.7 billion. Lend-Lease shipments constituted for the year as a whole nearly 80 percent of total exports. However, non-Lend-Lease or "cash" exports showed a substantial increase to 3.0 billion dollars in 1944 from 2.6 billion in 1943 (chart 24).

In terms of physical volume, as indicated by the Department of Commerce index of the quantity of exports, shipments of goods from the United States under Lend-Lease and for cash were no larger in 1944 than in 1943. They represented in both years an approximate trebling of the immediate prewar (1936-38) volume.

Although such long-range comparisons are necessarily rough because they must be based on different series of index numbers, the physical quantity of exports in 1943 and 1944 appears to have

been more than double that of the peak export movement during the last war. In both instances, supplies destined for the military forces of the United States in foreign countries are excluded.

The physical volume of imports was apparently somewhat higher in 1944 than in 1943. It was about 5 percent higher than in the immediate pre-war period, although lower than in 1941. when the United States was still obtaining large quantities of rubber, tin, and other raw materials, as well as sizable amounts of manufactured goods, from countries now cut off by the war. The production and transport to the United States of such a large volume of commodities was achieved in consequence of the widespread procurement activities of United States Government agencies with the cooperation of producing countries and as a result of the intensive use and close control of available shipping facilities on land and sea.

Table 10.—United States Foreign Trade, 1936-441

[Millions of dollars]

Item	1939	1940	1941	1942	1943	1944 2
Exports, including reexports, total	3. 177	4. 021	5, 147	8, 035	3, 372 12, 713 10, 105 2, 608	, 1

<sup>Merchandise trade. "Cash" exports represent non-</sup>Lend-Lease exports.
Partly estimated.

Source: U. S. Department of Commerce.

#### Lend-Lease Aid.

Lend-Lease shipments during the year provide a measure of our contribution of goods to the war effort of the other United Nations, and to the maintenance of their civilian and war economies. This is apparent from the commodity composition and geographic distribution of such shipments.

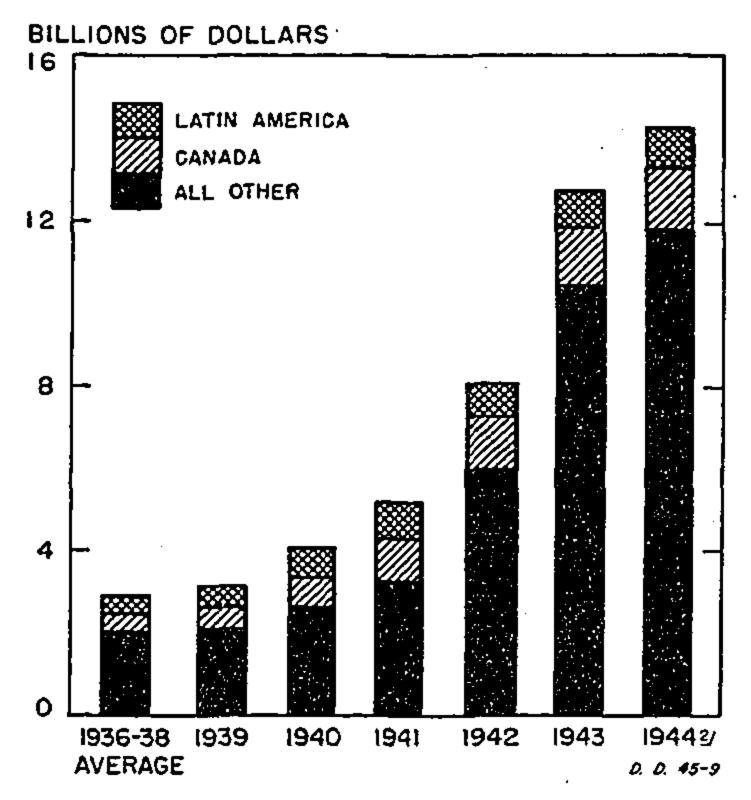
Well over half of the total value of the shipments consisted of munitions for the use of allied forces at the battle fronts. More than a fourth was composed of industrial materials and equipment to maintain war production in Allied countries. The remainder, about 15 percent, consisted of food for their armed forces and, to some extent, their civilian populations.

The United Kingdom, principal base for the offensive against Germany on the western front, received a considerably increased amount of Lend-Lease exports in 1944 as compared with 1943. Approximately 45 percent of total Lend-Lease shipments went to that destination alone. The U.S.S.R. also received a substantially larger amount of Lend-Lease supplies in 1944, accounting for 30 percent of the total.

Within the Pacific theatre, shipments increased to China and India, and declined to Australia and New Zealand. Those to Africa, the Middle East, and the Mediterranean area fell off following the narrowing of military operations in the Mediterranean theatre.

Lend-Lease exports to other countries, for strengthening military bases and for

# Chart 24.—Total Exports of the United States, by Geographic Areas <sup>1</sup>



<sup>1</sup> Includes lend-lease shipments and "cash" exports; excludes trade in gold and silver.

<sup>2</sup> Partly estimated.

Source: U. S. Department of Commerce.

other military purposes, continued relatively small and formed not more than 3 percent of all Lend-Lease exports in 1944.

Thus, Lend-Lease was an integral part of the services of supply of the United Nations, its volume, composition, and destination being governed by strategic considerations. The relative importance of Lend-Lease may be indicated in two ways.

From the standpoint of the United States, 10 percent of the total production of movable goods during 1944 was lend-leased to other countries. Considering munitions alone, roughly 14 percent of our total production has been lend-leased since the beginning of 1942 and an additional 2 percent has been purchased by our Allies for cash.

Lend-Lease and cash exports of munitions from the United States together have constituted roughly one-fifth of the total supply of munitions available to British countries since the outbreak of the war in 1939.3

From the standpoint of the United Kingdom, as the principal recipient, Lend-Lease transfers of munitions have constituted about 16 percent of the total supply of munitions produced by, or made available to, the British Commonwealth and Empire since the beginning of the war. About 70 percent has been

<sup>2</sup> In the years immediately preceding the present war, the value of exports constituted about 8 percent of the total value of movable

produced in the United Kingdom and about 10 percent has come from other Empire countries. The remaining 4 percent of Commonwealth and Empire supplies of munitions has come from the United States through cash purchases.

The contribution to the armed strength of the U. S. S. R. has also been very large, though not as much as in the case of the United Kingdom.

Exports to Latin America in 1944, almost entirely on a "cash" basis, were higher in value than in any other year of the war period and twice as high as in the prewar period 1936–38. Total "cash" exports were at approximately prewar level and were 50 percent higher than pre-war shipments to the area open to United States trade in 1944, although 10 percent lower in terms of physical volume.

Thus, just as war production in the United States has been carried to peak levels without any over-all curtailment of civilian consumption, so also has the general level of commercial export trade been substantially maintained through allocations for this purpose, notwithstanding the demands of war production at home and of Lend-Lease and our own armed forces abroad.

#### Imports Increase.

Imports in the United States rose to 3.9 billion dollars in 1944 from 3.4 billion in 1943 and were higher in value terms than in any year since 1929 despite the continued inaccessibility of many important sources of pre-war imports. These receipts from foreign countries, 40 percent being military, strategic, and critical commodities (as compared with 27 percent pre-war), played a vital part not only in war production as a whole but also in production for export to foreign countries.

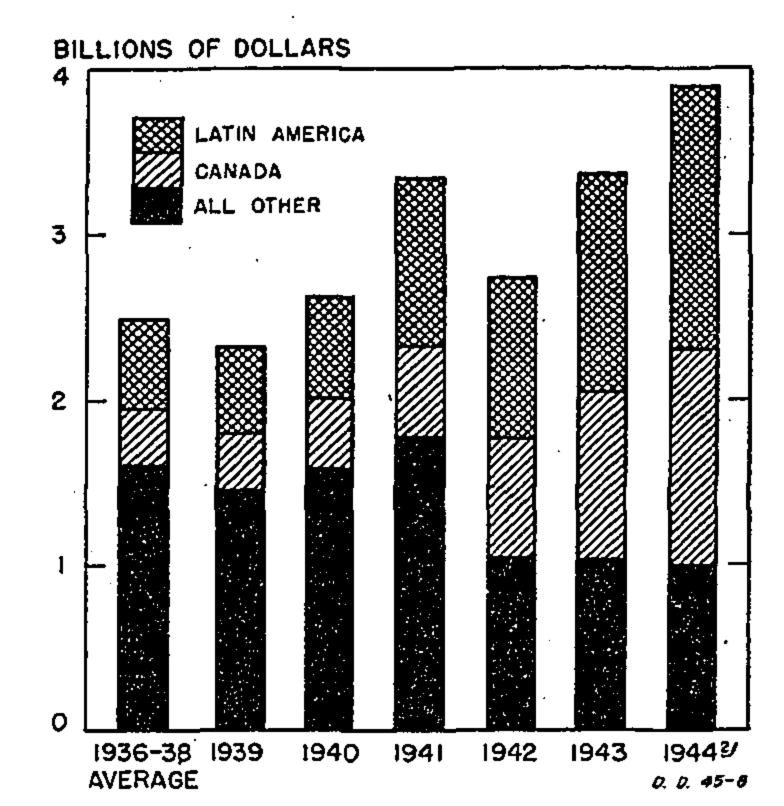
The rise in the value of United States imports in 1944 was chiefly the result of larger purchases from Canada and Latin American countries. (See chart 25.) These two areas supplied three-fourths of total imports by value in 1944 and shared about equally in the increase of 500 million dollars over 1943.

On a commodity basis, the rise in imports reflected primarily the entry of a larger amount of foodstuffs, especially grains, coffee, fresh vegetables, and alcoholic beverages. Foodstuffs comprised more than a third of total imports in 1944.

#### Prices and Control of Inflation

The inflationary potential continued large in 1944, but was controlled by Government restrictions and the restraint of consumers. It is evident that the stabilization record improved in 1944, as may be seen in the annual changes in the price indexes of the Bureau of Labor Statistics (table 13).

## Chart 25.—General Imports Into the United States, by Geographic Areas <sup>1</sup>



<sup>1</sup> Excludes trade in gold and silver.

<sup>2</sup> Partly estimated.

Source: U. S. Department of Commerce.

The left segment of chart 26 likewise reveals the comparative improvement last year. The other three segments of this chart represent the areas of major change in 1944, as compared with 1943. The chart gives in each instance the percentage change over the preceding year.

Within the limits of any such measure of price changes during a wartime period these percentages reveal the major changes that have taken place during 1944. The main reason for the smaller price advance in 1944 than in earlier war years was the stability of average food prices. The actual slight decline indicated came about as a result of the more plentiful supplies for civilians last year,

Table 11.—Lend-Lease and Cash Exports, by Geographic Areas, 1943–44 <sup>1</sup>

[Millions of dollars]

	l	1943		1944 2					
Destination	Lend- Lease	Cash	Total	Lend- Lease	Cash	Total			
Total	10, 105	2,608	1 <b>2,</b> 713	11, 300	3,000	14, 300			
United Kingdom_ Union of Soviet Socialist Repub-	4, 073	218	4, 291	5, 080	130	5, 210			
lics	2, 927	29	<b>2,</b> 956	3, 430	40	3, 470			
iterranean area <sup>3</sup> China and India <sup>4</sup> Australia and	1,606 588	124 41	1, 730 629		210 60	1, 440 900			
New Zealand American Repub-	527	42	569	350	50	400			
licsCanadaAll other coun-	98 3 206	721 1, 237	819 1, 443	80 3 245	1,000 1,255	1,080 1,500			
tries	81	196	277	45	255	300			

<sup>1</sup> Merchandise exports. Cash exports represent non-Lend-Lease exports.

<sup>2</sup> Partly estimated.
<sup>3</sup> Includes Italy, France, Malta, Gozo, Cyprus.
<sup>4</sup> Includes Ceylon, New Guinea, British and French Oceania.

<sup>5</sup> Lend-Lease shipments to Canada consist only of reimbursable Lend-Lease and of other Lend-Lease for the account of third countries.

Source: U.S. Department of Commerce.

<sup>3</sup> Statistics Relating to the War Effort of the United Kingdom (Cmd. 6564), p. 10. The data relate only to the over-all production of munitions and merchant vessels. They do not take into account work performed on the construction of air and military bases nor the provision of food and raw materials. Shipping services, as distinct from the construction of merchant vessels have also been excluded.

<sup>4</sup> The 40 percent proportion is based on 1943 data. The relatively high proportion applicable to pre-war trade is explained by the fact that many of the commodities now classified as strategic or critical are industrial raw materials which have been imported in large quantities in peacetime.

Table 12.—Geographic Distribution of United States Imports, 1936-44

[Millions of dollars]										
Origin	1939	1940	1941	1942	1943	1944 3				
Total	2, 318	2, 625	3, 345	2, 745	3, 372	3, 900				
American Republics Canada Enemy or enemy con- trolled areas:	518 340		1,008 554	977 717	1, 310 1, 024	1, 600 1, 300				
EuropeAsiaAll other countries	349 510 602	705		143	4 6 1, 0 <b>2</b> 5	3 3 994				

<sup>&</sup>lt;sup>1</sup> General imports of merchandise.

Source: U. S. Department of Commerce.

improved price controls, and the continuation of the Federal food subsidy program which aided in insulating prices at retail from price increases paid to producers.

Federal subsidies granted for food in 1944 were about 1.3 billion dollars. Over three-fourths of this total was involved in four major programs—butter, meat, wheat, and dairy food.

In contrast to the slight decline in food prices, larger increases occurred in clothing and housefurnishings than in 1943. The most important single factor in these upward trends last year was the scarcity of low-end items which forced consumers to purchase higher priced goods. While this phenomenon was widespread, it was perhaps most significent in the clothing field and largely explains the larger increase in 1944 as compared with the previous year.

Shortages of low-end items were particularly acute in men's work clothes, and in children's and infants' wear. Some attempts were made to alleviate

this situation by allocating materials for use in the production of specified low cost goods. While these initial steps were successful, the limited extent of the program did not significantly improve the situation, and plans were being formulated at the end of the year to extend the coverage to a much larger proportion of total clothing output.

The rise in housefurnishings prices was also affected by scarcity of low-priced goods. As may be seen from the chart, prices of these items advanced at a much sharper rate from 1943 to 1944 than from 1942 to 1943. An additional factor in the rise in 1944 was the limited return to the market of some pre-war type goods. For example, prices of living-room suites jumped 30 percent from 1943 largely as a result of the reappearance on the market of steel-spring furniture at prices substantially higher than when last sold.

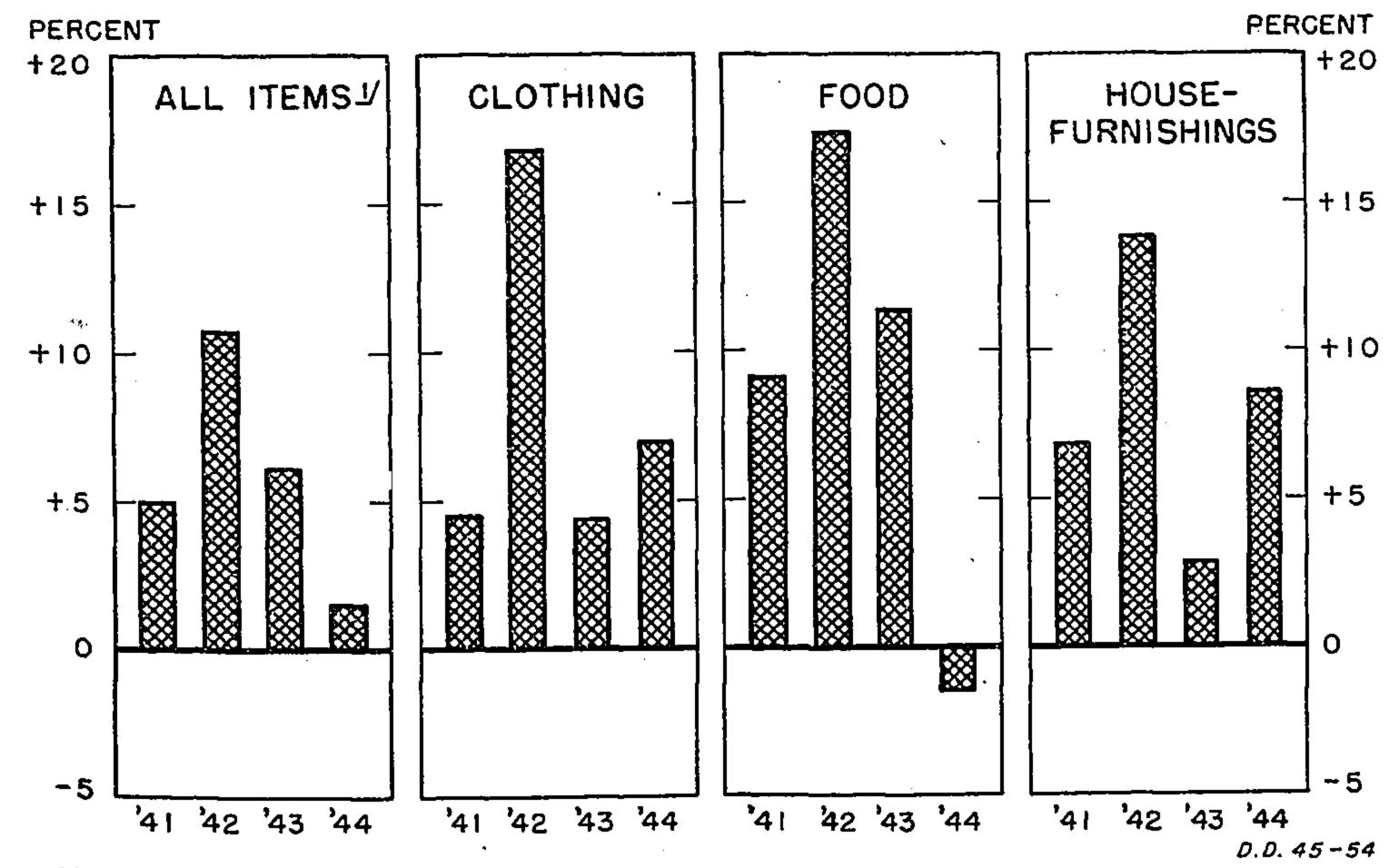
Fuel and light costs and rents which combined constitute over a fifth of living expenses were generally stable in 1944 as in preceding war years.

#### Factors in Stabilization.

The fundamental prerequisite for this record of comparative price stability in 1944 was found in the general adequacy of the over-all volume of goods available to civilians. It has been shown elsewhere that our productive machinery was adequate, despite the tremendous demands of war, to supply civilians with the essentials of a comfortable living.

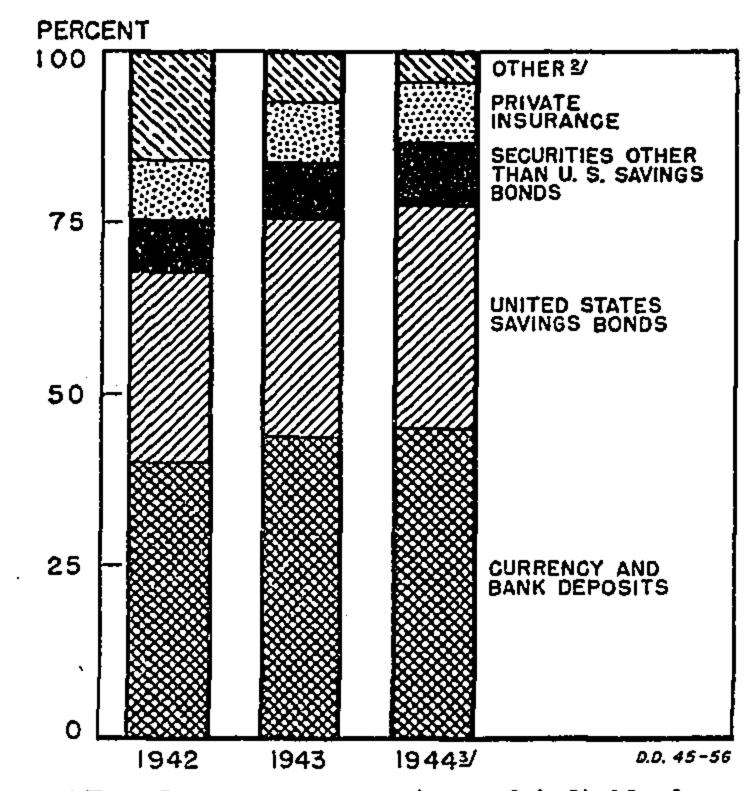
In view, however, of the accumulated inflationary pressures, other necessary conditions had to obtain. These were found in (1) the wage stabilization program, (2) price control and rationing, and (3) the large savings of individuals.

Chart 26.—Percentage Change in the Cost of Living and in Selected Components, Average for Each Year Compared With the Preceding Year



<sup>&</sup>lt;sup>1</sup> Includes some components of the Cost of Living not shown separately in chart.

Chart 27.—Percentage Distribution of Savings of Individuals <sup>1</sup>



<sup>1</sup> Based upon gross savings of individuals as estimated by the Securities and Exchange Commission, excluding purchases of durable consumer goods and government insurance.

<sup>2</sup> Includes consumer debt liquidation, and increases in equity of individuals in nonfarm dwellings and in savings and loan associations.

<sup>3</sup> Data included for the fourth quarter were estimated by the U.S. Department of Commerce.

Source: Securities and Exchange Commission.

Control over wage advances resulted in a slackening of the increase in 1944. Although wage rates in manufacturing were in late 1944 about 30 percent above those of January 1941, most of the increase occurred before the imposition of wage controls in October 1942. In the year ending October 1944, urban wage rates in manufacturing advanced about 4 percent compared with an increase of almost 8 percent over the 12 preceding months. It will be noted moreover that the rate increases last year were in considerable part in relatively low wage industries.

Generally more successful price control was also a significant factor in the slowing down of price increases last year. Control regulations of some kind were extended in 1944 to practically the entire range of goods flowing to the civilian market. Perhaps even more significant from the point of view of the effectiveness of controls were the efforts of the Office of Price Administration to transfer products from under the General Maximum Price Regulations to specific dollars and cents ceilings which are more precise and simpler to enforce. Rationing has also played a significant anti-in-

Table 13.—Percent Change in Prices

	Percent change					
December to December	Whole- sale prices	Retail prices of living essentials				
1940-41 1941-42 1942-43 1943-44	17 8 2 1½	10 9 3 2				

Source: U.S. Department of Labor.

<sup>&</sup>lt;sup>2</sup> Partly estimated.

Source: U. S. Department of Labor.

## Selected Business Indicators, 1939-44

Item	1939	1940	1941	1942	1943	1944	Item	1939	1940	1941	1942	1943	1944
INCOME							PRICES—continued						
Income payments (mil. of dol.), total.	70, 829	76, 237	92,732		143, 134		Wholesale prices (1926=100)—Con. Foods	70.4	71.3	82.7	99.6	106. 6	104. 9
Salaries and wages, total  Commodity producing industries	45, 658 16, 475	49, 702 18, 920		İ	101, 791 47, 453	ì	Other commodities  By economic classes:  Manufactured products		83. 0 81. 6	89. 0 89. 1	95. 5 98. 6	96. 9 100. 1	98. 5 100. 8
Direct and other relief Dividends and interest	1,071 8,891	1,098 9,175	1,112		939	943 11, 195	Raw materials Semimanufactured articles	70.2	71. 9 79. 1	83. 5 86. 9	100. 6 92. 6	112.1 92.9	113. 2 94. 1
Entrepreneurial income and net rents and royalties Other income payments	13, 441 1, 768	14,313 1,951	18, 599 1, 886	23, 933 2, 113	27, 161 2, 854	28, 017 4, 906	TRADE Retail trade (mil. of dol.):				ļ		
Total nonagricultural income  Cash income from farm marketings	64, 779	70,076	84, 181	104, 536	127, 673	141,084	Sales, all retail stores Durable goods stores	42, 042 10, 379	46, 388 12, 418	55, 490 15, 604	57, 552 9, 846	63, 680 9, 339	69, 275 9, 931
(mil. of dol.) PRODUCTION AND RELATED DATA	7,877	8, 340	11, 157	15, 374	19, 252	20, 235	Nondurable goods stores	5.117	33, 970 5, 435 2, 058	39, 886 6, 728 2, 511	47, 706 6, 429 2, 116	54, 341 5, 965 1, 704	59, 344 5, 800 1, 688
Farm marketings, volume	100	110	115	128	133	140	Nondurable goods stores	3, 280	3, 377	4, 217	4, 313	4, 261	4, 112
(1935-39=100), total	109 111 108	112 109 114	115 111 119	123 132	119 144	124 152	Sales, service and limited function wholesalers, total  Durable goods establishments	23, 642 7, 086	26, 243 8, 670	34, 353 12, 289	37, 000 10, 571	39, 922 9, 922	41, 255 10, 079
Manufacturers' shipments (1939=100), total Durable goods	100	116 127	164 198	213 279	261 371	275 385	Nondurable goods establishments. Inventories, Dec. 31, all wholesalers. Foreign trade (mil. of dol.):	16, 556 3, 549	17, 573 3, 730	22, 064 4, 697	26, 429 3, 992	30, 000 3, 965	31, 176 4, 002
Iron and steel and products Nonferrous metals and products_	100	125 121	198 176	233 213	250 258	252 273	Exports, incl. reexports, total Lend-lease exports		4, 021	5, 147 741	8, 035 4, 895	12, 714 10, 107	14, 257 11, 289
Electrical machinery Other machinery	100	129 129 130	205 207 172	276 328 172	427 408 270	498 411 310	General importsEMPLOYMENT AND WAGES	2, 318	2, 625	3, 345	2, 745	3, 372	3, 911
Transportation equipment ex- cept automobiles	100	178	486	1,540	2, 575	2, 534	Monthly average (thous, of persons): Armed forces 6	360	530	1,630	3, 940	8, 980	11, 390
Nondurable goods	100	108 113 106	140 154 134	168 173 177	186 200 194	199 210 215	Civilian labor force, total Employment Agricultural	745, 200 7 9, 400	7 54, 000 7 46, 600 7 9, 200	54, 100 49, 090 8, 640	54, 500 52, 110 8, 640	53, 480 52, 410 8, 280	52, 620 51, 780 8, 060
Paper and allied products Petroleum refining	100 100	115 102	151 123	156 130	167 152	178 183	Nonagricultural Unemployment	<sup>7</sup> 35, 800   <sup>7</sup> 8, 400	<sup>7</sup> 37, 400 <sup>7</sup> 7, 400	40, 440 5, 010	43, 470 2, 380	44, 130 1, 070	43, 720 840
Rubber products Textile-mill products Manufacturers' inventories, Dec. 31	100 100	109 106	156 160	177 199	282 205	300 193	Employees in nonagricultural es- tablishments, total Manufacturing	30, 353	31, 784 10, 780	35, 668 12, 974	38, 447 15, 051	39, 728 16, 924	38, 700 16, 123
(avg. mo. 1939=100), total Durable goods	108.8	119.9 129.8	158. 4 175. 5	210.1	178. 8 212. 8	168. 1 191. 7	Mining	845 1, 753	916 1, 722	947 2, 236	970 2,078	891 1, 259	835 680
Iron and steel and products  Nonferrous metals and products.  Electrical machinery	97.0	127. 4 106. 5 140. 8	129. 2 142. 6 234. 1	139. 2 151. 9 324. 1	139. 5 153. 0 346. 0	119. 5 152. 8 322. 1	itiesTrade	2, 912 6, 618	3, 013 6, 906	3, 248 7, 378	3, 433 7, 263	3, 619 7, 030	3, 761 7, 047
Other machineryAutomobilesTransportation equipment ex-	107.0 124.3	125. 4 144. 6	180. 0 193. 3	219. 6 232. 9	214. 5 245. 3	215. 9 209. 0	Financial, service and misc  Government  Wage-earner employment and pay	4, 160 3, 988	4, 310 4, 136	4, 438	4, 447 5, 203	4, 115 5, 890	4, 356 5, 906
cept automobiles Nondurable goods	129. 1 105. 9	278. 2 111. 3	663. 4 143. 5	1020.8 149.2	1085.9 149.0	836. 2 147. 3	rolls, monthly average (1939= 100):						450 -
Chemicals and allied products Food and kindred products Paper and allied products		117. 3 112. 3 120. 3	143. 7 162. 0 135. 1	158.7 156.2 144.0	159. 9 181. 5 124. 7	157. 1 174. 5 135. 4	Wage earners, all manufacturing  Durable goods industries  Nondurable goods industries	100.0	107. 5 115. 5 101. 3	132. 1 153. 8 115. 0	152.3 191.5 121.4	168. 7 227. 8 122. 1	159. 1 216. 1 114. 2
Petroleum refining	96.8	102. 1 124. 9	113. 2 143. 6	106.8 174.6	105. 6 179. 3	108. 5 2 176. 1	Pay rolls, all manufacturing Durable goods industries	100.0	114.5 125.1	167. 5 202. 3	242.3 321.3	316. 4 441. 1	<sup>3</sup> 317.9 <sup>8</sup> 441.6
Textile-mill products	107.3	116.2	147.3	147. 2	127.8	116.3	Nondurable goods industries  Average weekly hours per worker, all manufacturing		104. 1 38. 1	133.5	164.9 42.9	194. 4 44. 9	\$ 197. 0 \$ 45. 2
Aircraft		34	13 15	46 56	100	137 107	Durable goods industries Nondurable goods industries	38.0 37.4	39. 3 37. 0	42. 1 38. 9	45. 1 40. 3	46.6 42.5	<sup>8</sup> 46, 6 <sup>8</sup> 43, 1
Guns and fire control		3 4 3 3 3 7	8 21	57 53 77	100 100 100	87 117 83	Average hourly earnings (dollars), all manufacturing Durable goods industries	.633	.661	.729	. S53 . 947	. 961 1. 059	<sup>8</sup> 1. 017 <sup>8</sup> 1. 115
Communication and electronic equipment Other equipment and supplies	 	3 1 3 15	7 22	44 61	100	123 111	Nondurable goods industries  FINANCE	. 582	. 602	,640	. 723	. 803	8.859
Basic production data: Steel ingots and steel for castings		İ				]	Bank debits (mil. of del.): 9 Total (141 centers)	389, 680	408, 535	491,649	574, 702	715, 782	807, 721
(thous, short tons)	1	66, 982		í	•	89, 553 620, 000	New York City Outside New York City Money supply (mil. of dol.), Dec.	218, 298	236,952	197,724 293,925	226, 865 347, 837	$ 296,368  \  419,413  \  $	345, 585 462, 135
Crude petroleum (mil. bbls.) Lumber (mil. bd. ft.)	1, 265 28, 588	1, 353 31, 166	1, 402 36, 538	1, 387 36, 332	1,506 34,630	1, 678 32, 420	31: 10 Currency in circulation	[	8,732	11, 160	15,410	20, 449	25, 307
Wood pulp (thous, short tons) Cotton spindle activity, active spindle hours (millions)		1	1	1	9, 060 125, 413	9, 383	Deposits, adjusted, all banks and currency outside banks Deposits, adjusted, total incl.	64, 099	70, 761	78, 231	99, 701	122, 812	142, 700
Electric power (mil. kw. hrs.)	130, 336	144, 985	168, 170	189, 181	220, 970	230, 640	U. S. deposits  Demand deposits, adjusted, other than U. S.	ļ	63, 436	68,616	ţ .	103, 975	
New construction (mil. of dol.), total_	6,009	6, 991	10, 496	13, 383	7,675	3, 940	Time deposits, including postal savings	29, 793	34, 945 27, 738	38, 992 27, 729	48, 922	60, 815 32, 736	72,000 39,100
Private, total	3, 598 2, 114	4, 247 2, 355	5, 143 2, 750	2, 700 1, 268	1, 450 616	1, 580 498 233	Public finance, Federal (mil. of dol.): U.S. war program, expenditures, 11 cumulative total from June 1940.		1 011	15, 806		153, 342	
Industrial Public construction, total Residential	227 2, 411 76	423 2, 744 205	678 5, 353 479	315 10,683 600	6, 225 685	2, 360 192	Debt, gross, end of year	41, 961 8, 888	45, 039 9, 659	58, 020 19, 053	108, 170 56, 020	165,877	230, 630 97, 158
Military and navalIndustrial	119 14	510 144	1,756 1,400	5, 060 3, 571	2, 423 2, 006	730 745	War activities	1,358	2,778 5,834 2,366	12, 705 8, 849 4, 253	49,860 16,403 11,068	81, 859 34, 554 26, 549	89, 326 44, 421 34, 328
PRICES		ļ					Stock prices, Dec. (1935-39=100): Combined index (402 stocks)	97.0	84. 9	71.8	75.9	91.8	104.7
Cost of living (1935-39=100): Combined index, all items Food	99. 4 95. 2	100. 2 96. 6	105. 2 105. 5	116. 5 123. 9	123.6 138.0	125. 5 136. 1	Industrials (354 stocks) Public utilities (28 stocks) Railroads (20 stocks)	97.6 101.3 78.4	84. 9 90. 6 70. 0	73.8 66.2 61.0	78. 5 65. 2 69. 3	93.6	106.4
Prices received by farmers (1909-14=	95. 2	ນວ. ບ 100	124	123. 9	192	195	TRANSPORTATION	10.4	10.0	01.0	U8. 3	50. <del>U</del>	110.8
Retail prices, all commodities (1935–39=100) Wholesale prices (1926=100):	99. <b>o</b>	100.6	108.3	124, 9	134. 0	137. 6	Indexes (1935-39=100): All types, excl. local transit lines. Commodity	106 107	117 118	146 147	184 178	220 201	231 208
Combined index, all commodities.  Farms products	77. 1 65. 3	78. 6 67. 7	87. 3 82. 4	98.8- 105.9	103. 1 122. 6	104. 0 123. 3	Passenger, excl. local transit Freight carloadings (thous. cars)	105	113 36, 358	143 42, 352	236 42, 771	357 42, 440	388 43, 441
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<sup>1</sup> The series (except when source is stated) are selected from the statistical section beginning on p. S-1; available data prior to 1939 and descriptive notes may be found in the 1942 Supplement to the Survey unless other reference is given in the footnotes on pp. S-1—S-38. 1944 data in most cases are preliminary.

2 November 30.

3 July-December.

4 U. S. Forest Service estimates for 1939-41 and 1944; Bureau of the Census data for 1942-43.

5 March-December.

<sup>6</sup> Data from War Manpower Commission.
7 U. S. Department of Labor preliminary estimates rounded to hundred thousands.
8 11-months average.
9 Data beginning 1942 include additional banks (1942 totals are partly estimated);
1942 figures comparable with earlier data: Total, 553,391; New York, 210,961; outside New York, 342,430.
10 1944 data are as of November 30.
11 Includes Treasury expenditures and expenditures by the Reconstruction Finance Corporation and its subsidiaries.

flationary role in wartime. In addition to distributing scarce supplies equitably, they also serve to limit effective demand and thereby reduce the pressure on the prices of rationed goods.

The relatively improved supplies of foods, with the exception of such items as butter and cheese, made possible the easing of rationing restrictions during the greater part of the year. Indeed, for some months, in the summer and fall, rationing restrictions were lifted on the purchase of important meat items and canned vegetables. Only at the year end were these products returned to the ration list.

Rationing at the present time covers products, expenditures for which represent only one-fifth of all consumer expenditures for goods and one-seventh of consumer expenditures for goods and services. Though there are additional products in which the supply-demand situation is similar to some of the rationed commodities, the small percentage of consumer goods rationed reflects the general sufficiency of civilian supplies over the war period.

#### Savings of Individuals.

In 1944 as in preceding war years, individuals put aside a much larger pro-

portion of disposable income than in the years of peace. While these savings have played a vital role in maintaining the stabilization front, the very liquid nature of these savings continues to present an inflationary potential the control of which rests on the voluntary decisions of savers not to spend (chart 27).

Estimates based on Securities and Exchange Commission data indicate that individuals added last year almost 17 billion dollars to their already huge cash holdings, which by the end of the year amounted to about 95 billion dollars. While it appeared that over the year the rate of cash savings declined—particularly if account is taken of the fact that some of this cash represented postponed fourth quarter Federal personal tax liabilities—the all-important consideration is that they remained so large.

Since the start of the war these cash savings have consistently exceeded security purchases. Net security purchases in 1944 totaled about 15 billion dollars, an increase of a billion from 1943, due entirely to purchases of Government securities. These loans to the Government in both 1943 and 1944 constituted less than 10 percent of individual incomes, and combined with personal tax payments, represent only about one-fifth

of incomes in both years. There was no substantially increased restraint on consumer spending in 1944 from taxes or security savings.

By the end of the year, individuals had in their possession a volume of liquid assets—cash and U.S. Government securities—aggregating close to 150 billion dollars, equivalent to over 90 percent of total consumer incomes in 1944.

In summary, incomes continued to exceed by a substantial margin the value of goods available to consumers. Taxes tapped these increased incomes to only a limited extent, with the result that individuals were adding huge sums to their already large accumulations of liquid funds.

While wages and price advances were not completely stopped, the increases taking place were within manageable limits, and it was evident that the existing control mechanisms could cope with the potentially dangerous elements of inflation. Of course, the stabilization program did not provide for rigid evenness in prices, nor was it conceived for such a purpose. The significant element is the extent to which price advances were controlled with as little regimentation as took place.